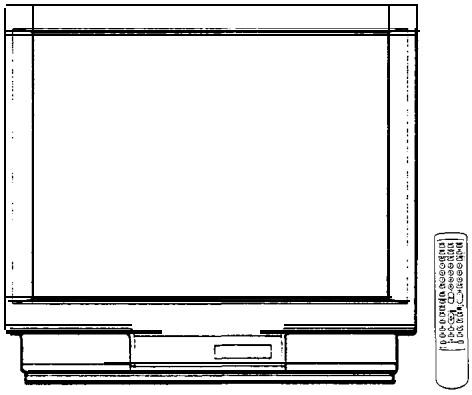
KV-27TS35
RM-Y102

SERVICEMANUAL

US Model
Chassis No. SCC-E54H-A

Canadian Model
Chassis No. SCC-E65E-A



LN-1 CHASSIS

MODELS OF THE SAME SERIES	
KV-27TS35	
KV-27TS27/27TS31	
KV-27TW75/27TW76	

SPECIFICATIONS

Television system American TV standards

Channel coverage VHF: 2 – 13
UHF: 14 – 69
Cable TV: 1 – 125

Picture tube Microblack™ Trinitron® tube
27-inch picture measured diagonally
28-inch picture tube measured diagonally

Antenna 75-ohm external antenna terminal for VHF/UHF

Input VIDEO and S VIDEO
S VIDEO IN (S terminal)
Y: 1 Vp-p, 75-ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75-ohms
Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative
Audio (phono jacks): 500 mVrms (100% modulation)
Impedance: 47 kilohms

output AUDIO OUT (VARIABLE) (phono jacks)
More than 408 mVrms at the maximum volume setting (variable)
Impedance: 5 kilohms

Speaker output 5 W x 2

Power requirements 120 V AC, 60 Hz

Power consumption 170W
5W Standby mode

Dimensions (w / h / d) 660.5x602.5 x468 mm
(26⅜ x 23¾ x 18⅜ in.)

Weight 46 kg
(99 lbs 4 oz)

Supplied accessories
Remote commander RM-Y 102 (1) with 2 size AA (R6) EVEREADY batteries

Recommended accessories
U/V mixer EAC-66
Connecting cable
VMC-810/820S, YC-15 V/30 V, RK-74A

Design and specifications are subject to change without notice.

MICROFILM

996479501

TRINITRON® COLOR TV
SONY®

(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAPTOTHE METAL CHASSIS, CRTSHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURTCIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAPAU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DETOUT DEPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS ÁLA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE A SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONTLE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLEMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SAFETY CHECK-OUT

(US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.

2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.

3 Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators

4 Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair Point them out to the customer and recommend their replacement.

5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.

6. Check the line cord for cracks and abrasion Recommend the replacement of any such line cord to the customer

7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.

8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.

9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage Check leakage as described below

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a coldwater pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

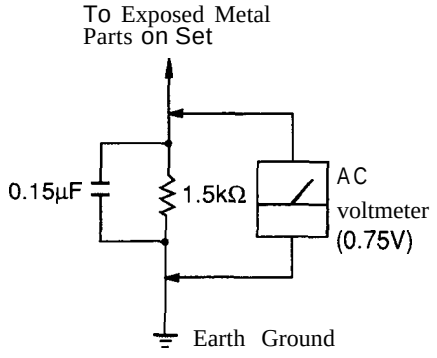


Fig A. Using an AC voltmeter to check AC leakage

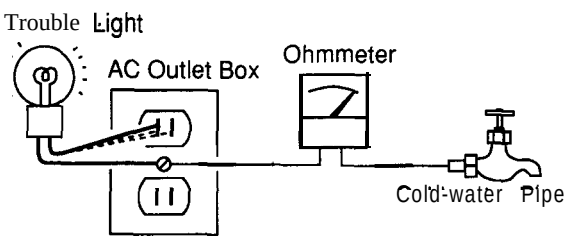


Fig. B. Checking for earth ground.

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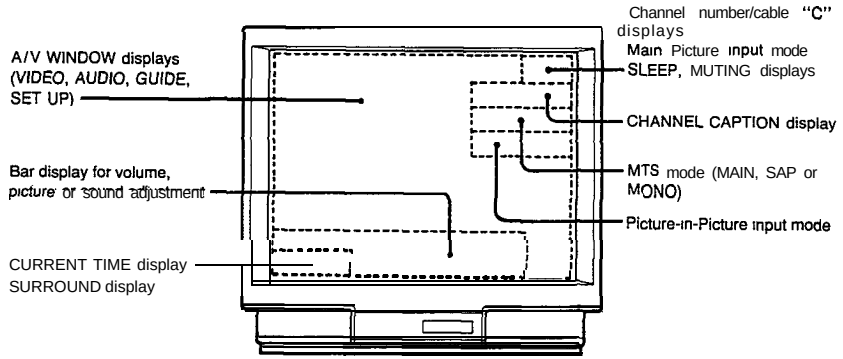
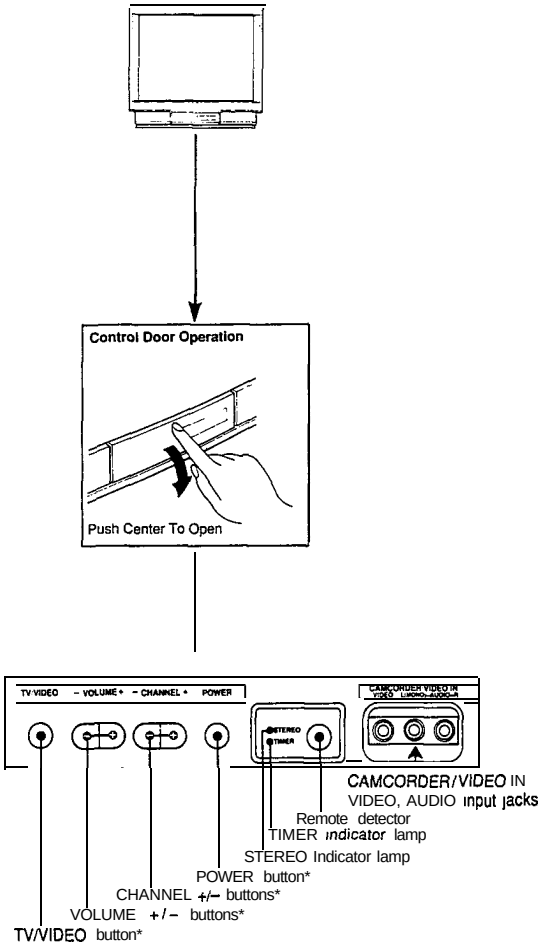
SECTION 1
GENERAL

1-1. LOCATING THE CONTROLS

Screen Displays

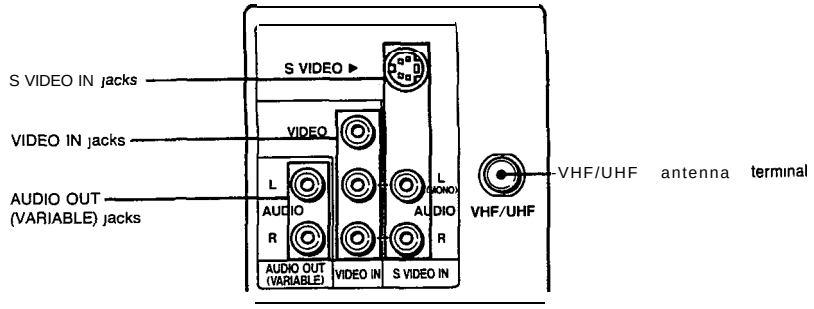

Channel number/cable "C" displays
Main Picture input mode
SLEEP, MUTING displays
CHANNEL CAPTION display
MTS mode (MAIN, SAP or MONO)
Picture-in-Picture input mode
A/V WINDOW displays (VIDEO, AUDIO, GUIDE, SET UP)
Bar display for volume, picture or sound adjustment
CURRENT TIME display
SURROUND display

Front Panel

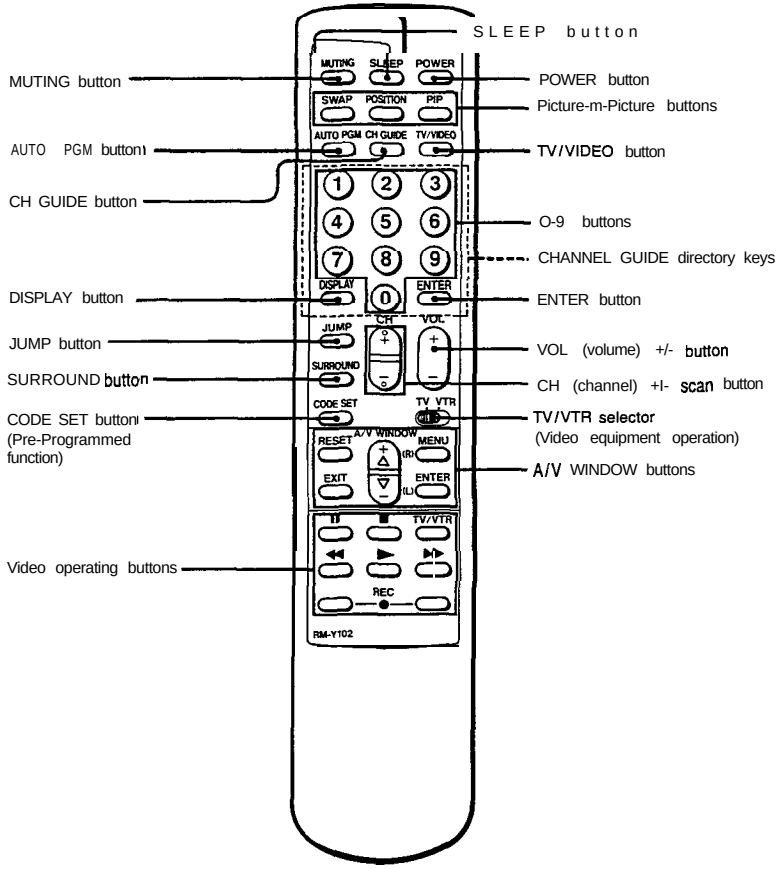


*Buttons with the same function are also located on the Remote Commander.

Rear Panel



Remote Commander



1-2. CONNECTING TV ANTENNA/CABLE

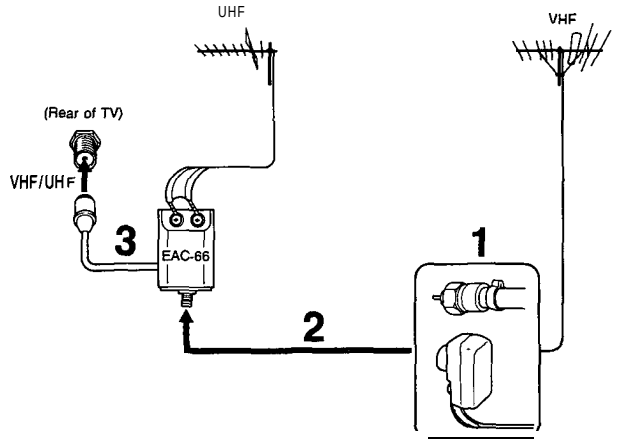
Connecting both VHF and UHF antennas

Use the EAG66 U/V mixer (not supplied).

1 Prepare the VHF antenna end using the appropriate connector (p. 12)

2 Connect the cables to the mixer.

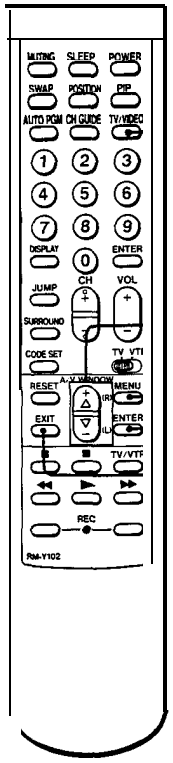
3 Attach the mixer to the VHF/UHF terminal.



When the U/V mixer is used
Snow and noise may appear in the pictures of the cable TV channels over 37 (W+ 1)

1-3. TURNING THE CABLE MODE ON OR OFF

All of the controls are on the Remote Commander.



-TV/VIDEO

-2,3 AIV WINDOW +/-

- 1 MENU

-ENTER

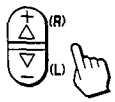
-MIT

If you have cable connected to your N , follow the steps below to turn the cable connection on or off. Cable mode is preset to ON when you use your N for the first time; turn cable OFF to preset or watch VHF or UHF channels.

1 Press MENU to display the following screen.

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER]
```

2 Press the +I- button to select SET UP




```
A/V WINDOW
 VIDEO
 AUDIO
 GUIDE
▶SET UP
USE [▲▼] & [ENTER].
```

Press ENTER.

```
SET UP
▶CURRENT TIME SET
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE OFF
```

3 Press +/– button and ENTER to select CABLE.

```
SET UP
 CURRENT TIME SET
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
▶CABLE OFF
```

Press the +/– button and ENTER to select ON or OFF alternately.

```
SET UP
 CURRENT TIME SET
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE  ON
USE [▲▼] & [ENTER].
```

↔

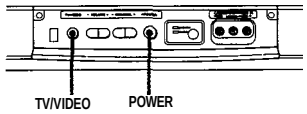
```
SET UP
 CURRENT TIME SET
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE  OFF
USE [▲▼] & [ENTER].
```

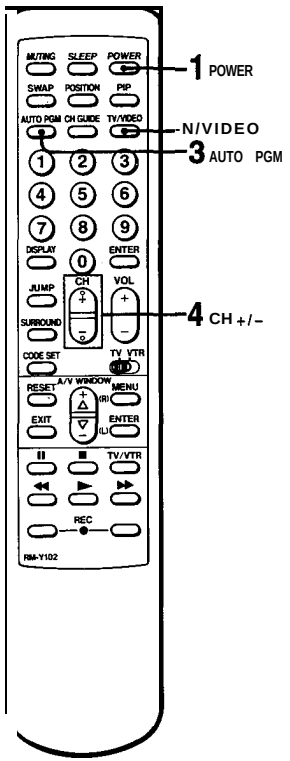
To return to TV mode.
Press EXIT.

Notes

- You cannot set CABLE ON / OFF while the TV is in VIDEO mode. Before setting, select TV mode by pressing TV/VIDEO.
- The menu will be cancelled automatically after 10 seconds if you do not push any buttons during that time.

14. PRESETTING TV CHANNELS





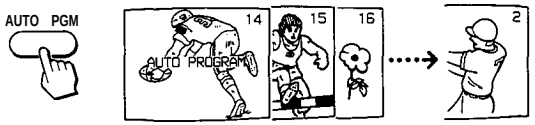
1 Press POWER on the TV or the Remote Commander to turn the N on.

2 Turn the cable connection on or off, depending on if you want to preset cable or VHF/UHF channels.

(FOLLOW THE STEPS ON P 14)

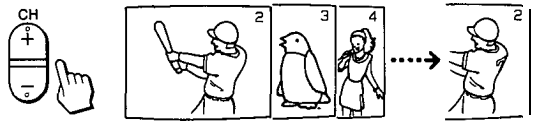
If "VIDEO" or "S VIDEO" is displayed on the screen, press the N/VIDEO button on the Nor the Remote Commander so that a channel number appears.

3 Press AUTO PGM.



"AUTO PROGRAM " is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the TV's memory.
When no more channels can be found. the programming stops and the lowest numbered channel is displayed.

4 Press CH + / – to check or view preset channels.

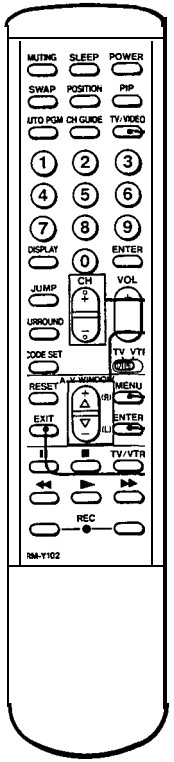


Channels that can be received on this TV:

VHF 2 — 13
UHF 14 — 69
Cable: 1 — 125

To erase unnecessary channels, or to add channels that could not be preset automatically because their signal strength was too weak, follow the steps in "Erasing Unnecessary Channels" and "Presetting Only Dewed Channels"

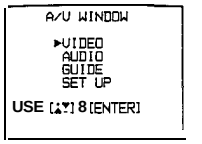
Erasing Unnecessary Channels — CHANNEL ERASE



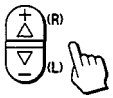
Use this feature to erase non-receiving channels from the channel scan memory.

Note
You cannot use CHANNEL ERASE while the N is in VIDEO mode. Before erasing channels, select N mode by pressing N/VIDEO.

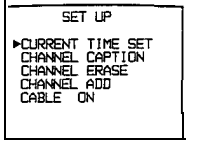
1 Press MENU to display the following screen.



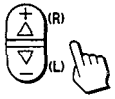
2 Press the +I- button to select SET UP

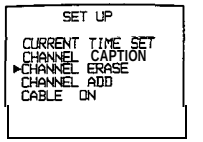


Press ENTER.

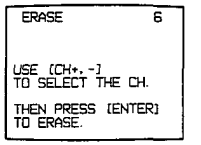


3 Press the + / – button to select CHANNEL ERASE.

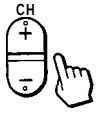


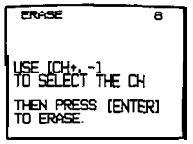


Press ENTER.

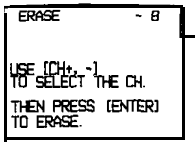


4 Press the CH +I- button to select the channel you want to erase.





Press ENTER.
A "–" appears before the channel number, showing that the channel has been erased from the channel scan memory.



The next time you press the CH +/– buttons, channel 8 will be skipped.
Repeat step 4 to erase other channels.

To return to TV mode
Press EXIT.

Note

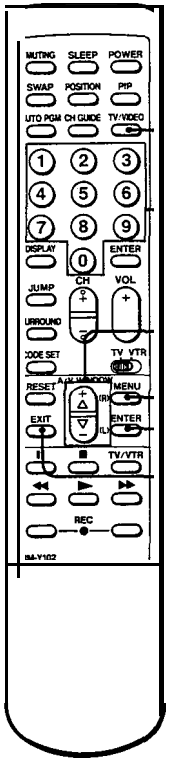
When you erase a VHF or UHF channel, the cable N channel with the same number is also erased, and vice versa.

Cable N channel chart*

Cable N systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Number on this TV	Corresponding cable TV channel
1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
.	
93	W+57
94	W+58
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W+59
101	W+60
102	W+61
123	W+82
124	W+83
125	W+84

* This designation of cable N channels conforms to the EIA/NCTA recommendation.
Check with your local cable N company for more complete information on the available channels.



-N/VIDEO

-4 0 – 9 buttons

-2,3 A/V WINDOW +/–

- 1 MENU

– ENTER

– EXIT

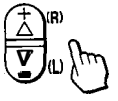
Use this feature to add channels one by one to the channel scan memory.

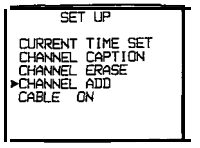
Note

You cannot use CHANNEL ADD while the N is in VIDEO mode. Before adding channels. select N mode by pressing N/VIDEO.

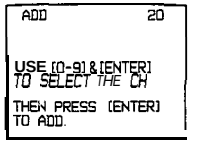
1-2 (FOLLOW STEPS 1 & 2 ON)

2 3 Press the +/– button to select CHANNEL ADD.

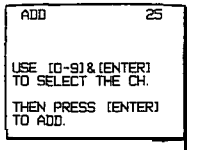




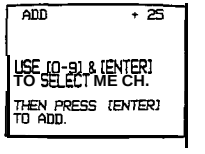
Press ENTER.



4 Press the 0 – 9 buttons to select the channel you want to add. For example, to add channel 25, press 2, 5 and ENTER.



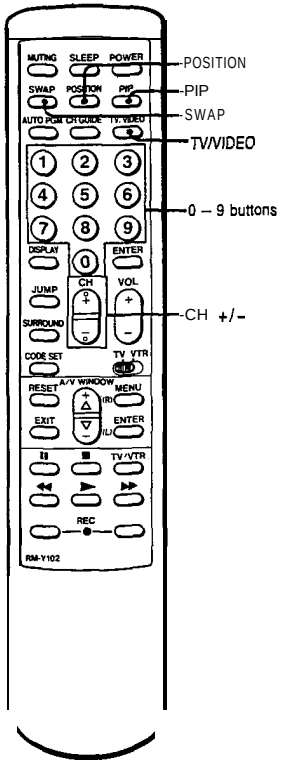
Press ENTER again.
A "+" appears before the channel number, showing that the channel has been added to the channel scan memory.



Repeat step 4 to add other channels.

To return to TV mode
Press EXIT.

1-5. USING PICTURE-IN-PICTURE



With this feature, you can watch both the main picture and a video source. simultaneously, by means of a wmdow picture.

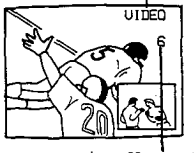
For example. Use Picture-m-Picture when you want to watch a TV program and a video source from connected equipment (VCR, video disc player, etc.) at the Same time.

If you connect a VCR, you can watch two different TV programs at the *same* time.

Displaying a window picture — PIP

Press PIP

PIP



Input source mode or N channel for the main picture (display is green)

Input source mode or N channel for the wmdow picture (display is white)

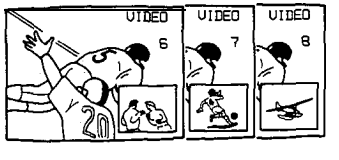
A window picture will appear in the same input mode as the last time you used PIP

Scanning channels in the window picture

Press CH + /– or the 0 – 9 buttons and ENTER.

CH

ENTER



To make the window picture disappear
Press PIP again.

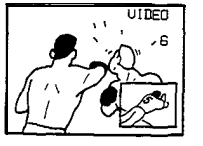
Swapping the main and window pictures — SWAP

1 Press PIP to display a window picture.

PIP

2 Press SWAP

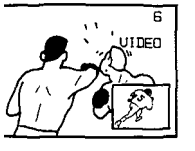
SWAP



Changing the position of the window picture — POSITION

1 Press PIP to display a wmdow picture.

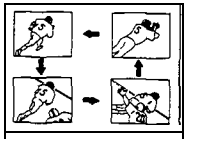
PIP



2 Press POSITION.

Each time you press POSITION, the window picture will move counterclockwise on the screen, as illustrated below.

POSITION



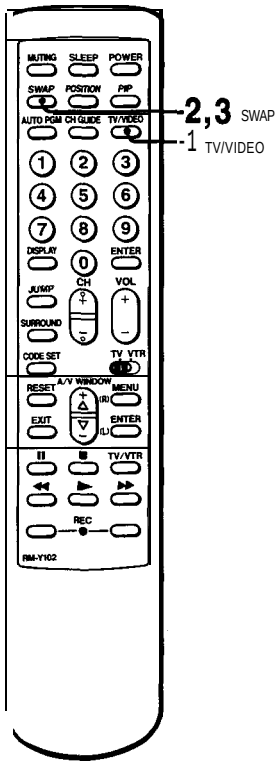
To change the input mode of the wmdow picture

1 Press TV/VIDEO to change the input mode of the main picture.
(Selects TV, VIDEO, S VIDEO in sequence)

2 Press SWAP to swap the *main picture* with the wmdow picture.

Notes

- You cannot hear the sound of the wmdow picture channel.
- If the *main picture* is blocked, the display "BLOCKED" will appear on the main screen. and Picture-m-Picture will not function.
- If the main picture is not receiving an Image. the wmdow picture will disappear. It will reappear when you switch to a receiving channel.
- When the main picture is black and white, depending on the N signal some wmdow picture images may also be black and white.
- When you turn PIP on. or when you turn the TV on with PIP mode on. the window picture will appear at the bottom right of the screen.
- Depending on the condition of the main picture's signal, the window picture may be affected.



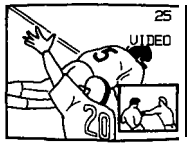
Displaying a VIDEO input image as a window picture

To watch VIDEO images (VCR playback or TV through a VCR tuner) using Picture-In-Picture, first select a program mode (cable or VHF/UHF), by following the steps, "Turnmg the Cable Connection On or Off." The" follow the steps below.

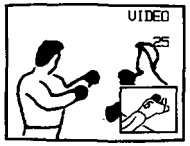
1 Press **TV/VIDEO** to select the appropriate video input mode. (Selects TV, VIDEO and S VIDEO modes in sequence)

The video image from the input mode you select will appear as the main picture.

2 Press SWAP so that the video input picture becomes a window picture.



3 Press SWAP age" to change the video input picture back to the main ptcture.



You can only change VIDEO input modes of the main picture.

Note

To operate your VCR with the supplied Remote Commander, — "Using the Remote Commander."

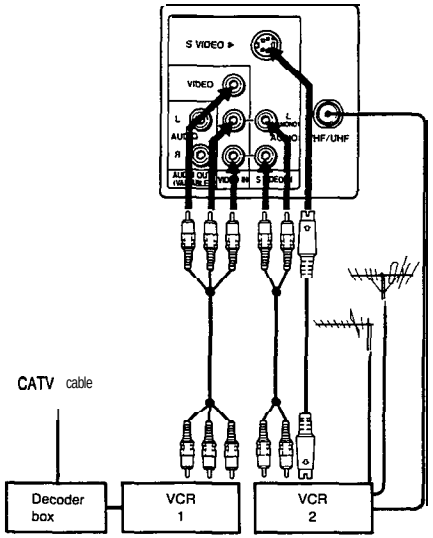
Displaying pay cable TV as a window picture

In order to use Picture-m-Picture with pay cable TV Images, make sure the connections are made as illustrated below. Select cable mode by following the steps, "Turning the Cable Connection 0" or Off." Then follow the steps below.

1–3 Follow steps 1 — 3 in "To display a VIDEO input image as a window picture".

4 Put your VCR on an inactive channel (CH 3 or 4).

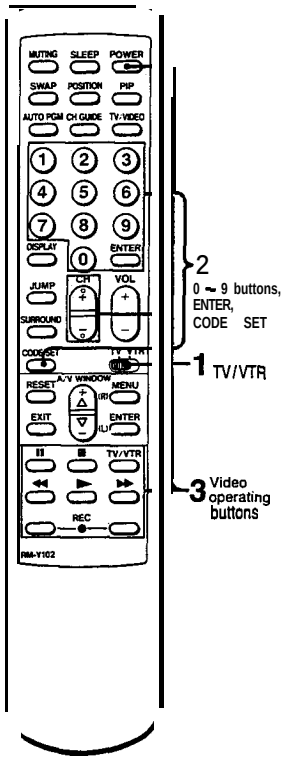
5 Change pay cable TV channels with the decoder box.



1-6. USING THE PRE-PROGRAMMED REMOTE COMMANDER

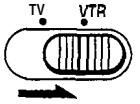
You can operate other video equipment that has an infrared remote detector with this supplied Pre-Programmed Remote Commander.

Operating Sony or non-Sony Video Equipment — Pre-Programmed Function



With the supplied Remote Commander, you can operate a Sony video cassette recorder (Beta. 8mm, VHS) or multi disc player as well as most non-Sony video equipment connected to your TV by following the steps below.

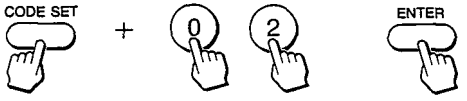
1 Set the TV/VTR selector to VTR.



Note

When the selector is set to VTR, the POWER and CH +/- buttons on the Remote Commander function as video operating buttons and cannot be used to operate the TV.

2 While pressing CODE SET, press the 0 – 9 buttons to enter the manufacturer's code *number.* For example, to operate a Sony 8 mm VCR, press 0, 2 and ENTER.



3 Use the video operating buttons on the Remote Commander to operate the video equipment.

operating a VCR

To turn on or off	Press POWER
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/–
To record	Press ● (2 buttons simultaneously).
To play	Press ▶
To stop	Press ■ .
To fast forward	Press ▶▶
To rewind the tape	Press ◀◀.
To pause	Press II.
To search the picture forward and backward	Press ▶▶ or ◀◀ during playback.

Operating a Video Disc Player

To play	Press ▶
To stop	Press ■.
To pause	Press II.
	To resume normal playback, press age,".
	● Th,s function IS effective only for CAV (standard-play disc). With CLV (extended-play disc), the TV will go into the standby mode if II is pressed.
To search the picture forward and backward	Keep pressing ▶▶ or ◀◀ during playback.
	To·resume normal playback, release the button.

Manufacturers and Code Numbers (VCR)

Manufacturer	Code "umber
SONY	01. 02. 03, 04
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11. 12, 15
FUNAI	29
GENERAL ELECTRIC	05. 06
GOLDSTAR	25
HITACHI	07. 08
JVC	16
MAGNAVOX	05, 06.09
MITSUBISHI	18, 19, 26. 27
MULTITECH	29
NEC	16, 23, 3 1
PANASONIC	05, 06
PHILCO	05, 06
PHILIPS	05. 06, 09
OUASAR	05. 06
RCA	07. 08
SAMSUNG	24, 32
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	26. 29
TOSHIBA	20, 21
TOTE·VISION	25
ZENITH	17

The code numbers for Sony equipment are assigned as follows:

01	Beta, ED Beta VCR
02	8mm VCR
03	VHS VCR
04	Video disc player

For your convenience

Write the manufacturer name and code number for your equipment onto one of the supplied self-adhesive labels and affix to the Remote Commander for easy reference.

	BRAND	CODE
1		
2		
3		

Notes

- If more than one code "umber is listed far manufacturers other than Sony, try entering *them one by one.* until you come to the correct code for your equipment.
- If the video equipment does no, have a certain function. the corresponding button on this Remote Commander will no, operate.

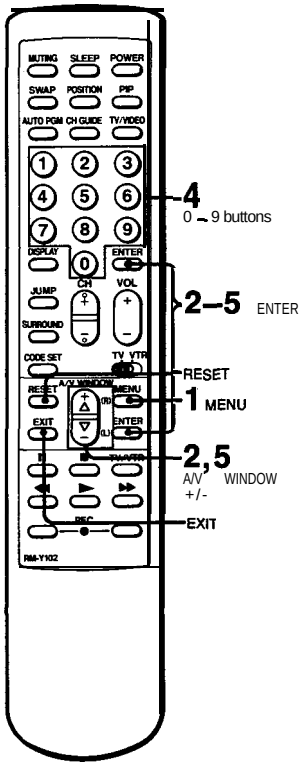
Note

I" some rare cases, you may not be able to operate Your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. I" this case. please use the equipment's own remote control unit.

CAUTION

When you remove the batteries from the Remote Commander, all the settings will revert to the Sony Beta setting. Reset the codes by following the steps on p. 30.

1-7. SETTING THE CURRENT TIME



Set the current time before using the Timer-activated functions from the GUIDE menu.

1 Press MENU to display the following screen.

MENU

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

2 Press the +I- button to select SET UP

(R) (L)

```
A/V WINDOW
 VIDEO
 AUDIO
 GUIDE
▶SET UP
USE [▲▼] & [ENTER]
```

Press ENTER.

CURRENT TIME SET is already selected for you.

ENTER

```
SET UP
▶CURRENT TIME SET
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE - ON
```

3 Press ENTER.

ENTER

```
CURRENT TIME SET

-- --AM

SET THE TIME.
USE [0-9] & [ENTER]
```

4 Press the 0 – 9 buttons and ENTER to enter the current time. For example, to set the time at 3:15, press 0, 3, 1, 5. (You must press 4 digits.)

0 3 1 5

```
CURRENT TIME SET

03:15AM

SET THE TIME.
USE [0-9] & [ENTER].
```

Press ENTER.

ENTER

```
CURRENT TIME SET

3:15AM

SET AM OR PM.
USE [▲▼] & [ENTER].
```

5 Press the +/– button, to select AM or PM alternately.

(R) (L)

```
CURRENT TIME SET

3:15AM

SET AM OR PM.
USE [▲▼] & [ENTER].
```

↔

```
CURRENT TIME SET

3:15PM

SET AM OR PM.
USE [▲▼] & [ENTER].
```

Press ENTER.

ENTER

```
CURRENT TIME SET

3:15PM

CURRENT TIME
IS SET.
```

To clear the time setting
Press RESET.

To reset the time
Press RESET while in the CURRENT TIME screen. an* repeat steps 4 and 5.

To display the time
Set TIME DISPLAY ON/OFF.

To return to N mode
Press EXIT.

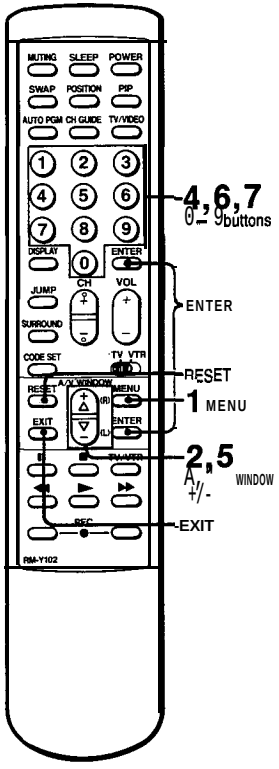
Notes

. The internal clock of this N operates on a 12-hour cycle. If a 24-hour cycle number (for instance, 13:00) is entered. it will be cleared when you press ENTER.

12:00 AM stands for midnight.
12:00 PM stands for noon.

- All the settings including TIME SET will be erased if you unplug the TV, or if a power failure occurs. Reset the current time by following steps 1 – 5.

1-8. USING THE TIMER-ACTIVATED FUNCTIONS-GUIDE



Using the GUIDE feature, you can call up a" on-screen me"" giving instructions on how to use the timer-activated functions: ON/OFF TIMER, CHANNEL BLOCK, AND TIME DISPLAY ON/OFF

Setting the ON/OFF TIMER

With this function you can sst your favorite program to appear on the screen at the time that you set.

EXAMPLE: Set the timer to turn on the TV to channel 21 at 3:15 PM, for 2 hours.

1 Press MENU to display the following screen

MENU

```
wu WINDOW
▸VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

2 Press the +/– button to select GUIDE.

(R) (L)

```
A/U WINDOW
 VIDEO
 AUDIO
▸GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

Press ENTER.

ON/OFF TIMER is already selected for you.

ENTER

```
GUIDE
▸ON/OFF TIMER
 CHANNEL BLOCK
 TIME DISPLAY: ON
```

3 Press ENTER.

ENTER

```
GUIDE
CURRENT TIME IS
NOT SET.

PRESS [ENTER] TO
SET THE TIME.
```

If this screen appears, follow steps 3 5 *on pp. 32 – 33.* Then begin again from step 1 on this page.

```
ON/OFF TIMER

-- --AM _H CH---

SET THE TIME.
USE [0-9] & [ENTER]
```

If this screen appears, continue from step 4 on the next page.

4 Set the time that you want the TIMER to start by pressmg 0 – 9 (you must press 4 digits) and ENTER.

0 3 1 5 ENTER

```
ON/OFF TIMER

03:15AM _H CH---

SET THE TIME.
USE [0-9] & [ENTER].
```

5 Select AM or PM by pressmg the +/– buttons. and prsss ENTER.

(R) (L) ENTER

```
ON/OFF TIMER

3:15PM _H CH---

SET AM OR PM.
USE [▲▼] & [ENTER].
```

6 Set the duration of time that you want the TV to remain on. by pressmg 1 – 9 and ENTER.

2 ENTER

```
ON/OFF TIMER

3:15PM 2H CH---

SET THE DURATION.
USE [0-9] & [ENTER]
```

7 Set the channel that you want the TV to turn on to, by pressmg 0 – 9 and ENTER.

2 1 ENTER

```
ON/OFF TIMER

3:15PM 2H CH 21

SET THE CHANNEL.
USE [0-9] & [ENTER].
```

The following screen will appear, showing that the TIMER has been set.

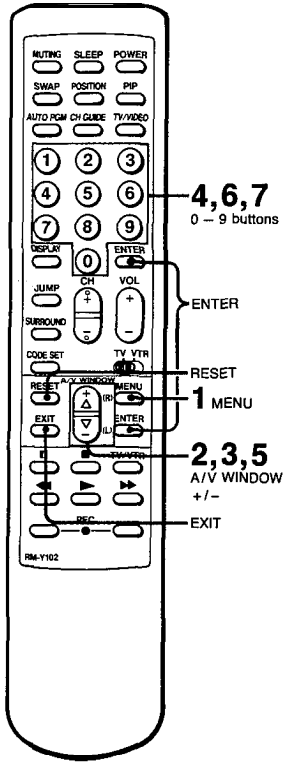
```
ON/OFF TIMER

3:15PM 2H CH 21

ON/OFF TIMER
IS SET.
```

To clear the ON/OFF TIMER setting Press RESET.

To return to N mode Press EXIT.

Notes

- While the TIMER is set. the TIMER indicator lamp an the TV will be lit.
- One minute before the timer goes off. the "TV WILL TURN OFF" display will appear on the screen.
- If you have not set the clock correctly, the ON/OFF TIMER will not operate. "Setting the CURRENT TIME" to set the clock.
- The TIMER setting will be erased if you unplug the TV, or if a power failure occurs. Repeat steps 1 – 7 to reset the TIMER.



Setting CHANNEL BLOCK

Use this function to block a channel from appearing on the screen during the preset time, for Instance, to prevent children from watching undesirable programs.
EXAMPLE: Set CHANNEL BLOCK at 8:45 PM, for one hour, on channel 38.

1 Press MENU to display the following screen.

MENU

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

2 Press the +/– button to select GUIDE.

(R) (L)

```
A/V WINDOW
 VIDEO
 AUDIO
▶GUIDE
 SET UP
USE [▲▼] & [ENTER]
```

Press ENTER.

ENTER

```
GUIDE
▶ON/OFF TIMER
 CHANNEL BLOCK
 TIME DISPLAY: ON
```

3 Press the +/– buttons to select CHANNEL BLOCK.

(R) (L)

```
GUIDE
 ON/OFF TIMER
▶CHANNEL BLOCK
 TIME DISPLAY: ON
```

Press ENTER.

ENTER

```
CURRENT TIME IS
NOT SET.

PRESS [ENTER] TO
SET THE TIME.
```

If this screen appears, follow *steps 3 5.*
The begin again from step 1 on this page.

```
CHANNEL BLOCK

-- --AM --H CH---

SET THE TIME.
USE [0-9] & [ENTER].
```

If this screen appears. proceed *to* step *4 on* the next page.

4 Set the time that you want CHANNEL BLOCK to start by pressmg 0 – 9 (you must press 4 digit) and ENTER.

0 8 4 5 ENTER

```
CHANNEL BLOCK

08:45AM --H CH---

SET THE TIME.
USE [0-9] & [ENTER].
```

5 Select AM or PM by pressmg the +/– button, and press ENTER.

(R) (L) ENTER

```
CHANNEL BLOCK

8:45PM --H CH---

SET AM OR PM.
USE [▲▼] & [ENTER].
```

6 Set the duration of time that you want the N to remain blocked (up to 9 hours). by pressmg 1 – 9 and ENTER.

1 ENTER

```
CHANNEL BLOCK

8:45PM 1H CH---

SET THE DURATION.
USE [0-9] & [ENTER]
```

7 Set the channel that you want to block, by pressmg 0 – 9 and ENTER.

3 8 ENTER

```
CHANNEL BLOCK

8:45PM 1H CH 38

SET THE CHANNEL.
USE [0-9] & [ENTER].
```

The following screen will appear, showing that CHANNEL BLOCK has been set.

ENTER

```
CHANNEL BLOCK

8:45PM 1H CH 38

CHANNEL BLOCK
IS SET.
```

If you select a channel which has been blocked, the BLOCKED screen will appear.

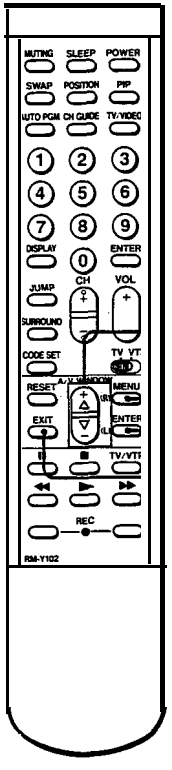
```
BLOCKED
```

To clear the BLOCK setting
Press RESET,

To ret™, to TV mode
Press EXIT.

Notes

- If you set a new CHANNEL BLOCK by following steps 1 – 7, the original setting will be erased.
- If you have not set the clock correctly. CHANNEL BLOCK will not operate. 'Setting the CURRENT TIME" to set the clock.



-2,3,4 A/ WINDOW
+/-
-1 MENU
-ENTER
-EXIT

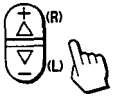
Setting the TIME DISPLAY

1 Press MENU to display the following screen.

MENU

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

2 Press the +I- button to select GUIDE.



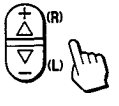

```
A/V WINDOW
 VIDEO
 AUDIO
▶GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

Press ENTER.

ENTER

```
GUIDE
▶ON/OFF TIMER
 CHANNEL BLOCK
 TIME DISPLAY: ON
```

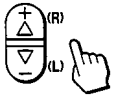
3 Press the +/– button and ENTER to select TIME DISPLAY.



ENTER

```
GUIDE
 ON/OFF TIMER
 CHANNEL BLOCK
▶TIME DISPLAY: ON
```

4 Press the +I- button to select ON or OFF alternately.
(Display is red)




```
GUIDE
ON/OFF TIMER
CHANNEL BLOCK
TIME DISPLAY: OFF
USE [▲▼] & [ENTER].
```

```
WIDE
ON/OFF TIMER
CHANNEL BLOCK
TIME DISPLAY: ON
USE [▲▼] & [ENTER]
```

Press ENTER.

The display will turn green, showing that the mode has been set.

ENTER

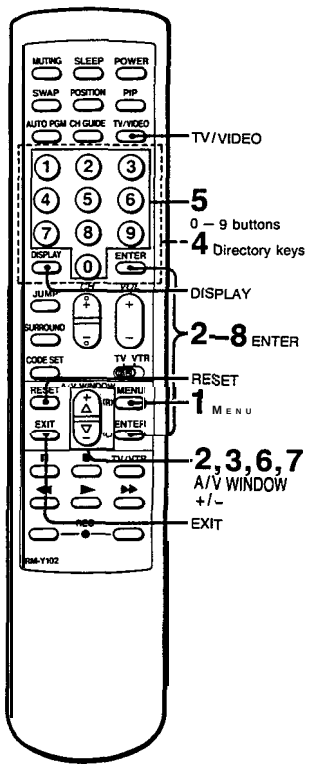
```
GUIDE
 ON/OFF TIMER
 CHANNEL BLOCK
▶TIME DISPLAY: ON
```

To return to N mode
Press EXIT.

Notes

- when TIME DISPLAY is set to ON. the time will remain on the screen.
- The menu screens will be cancelled automatically after 10 seconds it you do not push any buttons during that time.

1-9. USING CHANNEL CAPTION



Captioning the channel display — CHANNEL CAPTION

Use this feature to caption up to 12 channel number displays with the matching channel call letters. For example, caption channel 20 with ESPN.

1 Press MENU to display the following screen.

MENU

```
A/V WINDOW
▶VIDEO
 AUDIO
 GUIDE
 SET UP
USE [▲▼] & [ENTER].
```

2 Press the +/– button to select SET UP

(R) (L)

```
A/V WINDOW
 VIDEO
 AUDIO
 GUIDE
▶SET UP
USE [▲▼] & [ENTER].
```

Press ENTER.

ENTER

```
SET UP
▶CURRENT TIME SET
 CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE  ON
```

3 Press the +/– button to select CHANNEL CAPTION.

(R) (L)

```
SET UP
 CURRENT TIME SET
▶CHANNEL CAPTION
 CHANNEL ERASE
 CHANNEL ADD
 CABLE  ON
```

Press ENTER.

ENTER

```
CHANNEL          16
CAPTION          _____
SELECT A DESIRED
CH GUIDE KEY FROM
[0-9], [DISPLAY]
& [ENTER].
```

4 Enter a directory (CHANNEL GUIDE) number for the caption by pressmg one of the directory keys. For example, to set caption number 4. press 4.

1 2 3 4 5 6 7 8 9 DISPLAY 0 ENTER

```
CHANNEL          16
CAPTION          4____
USE [▲▼] & [ENTER]
TO SELECT THE CH.
```

5 Select the channel you want to caption by pressmg 0 – 9 and ENTER.

2 0 ENTER

```
CHANNEL          20
CAPTION          4____
SELECT THE LETTER.
USE [▲▼] & [ENTER].
```

6 Select the first letter by pressmg the +/– button and ENTER
Press + to advance alphabetically; press – to go back.

(R) (L) ENTER

```
CHANNEL          20
CAPTION          4E___
SELECT THE LETTER.
USE [▲▼] & [ENTER].
```

7 Select each remaining letter by repeating step 6.
(For a 3-letter caption. leave a space by pressing ENTER only.)

(R) (L) ENTER

```
CHANNEL          20
CAPTION          4ESPN
PRESS [ENTER] TO
CONTINUE.
```

8 To set the next caption, press ENTER again, and repeat the steps from step 4.

ENTER

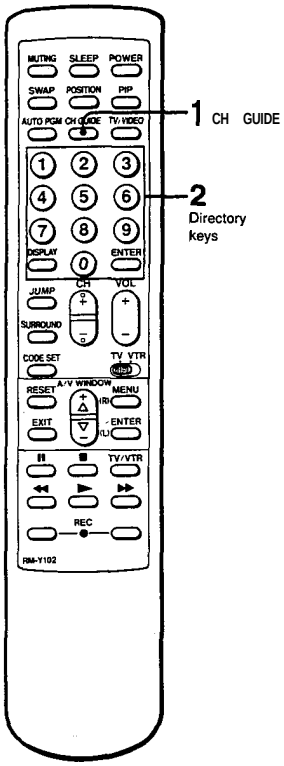
```
CHANNEL          20
CAPTION          4ESPN
SELECT A DESIRED
CH GUIDE KEY FROM
[0-9], [DISPLAY]
& [ENTER].
```

To erase unneeded captions
Call the caption setting screen by following steps 1 – 4, and press RESET.

To return to TV mode
Press EXIT.

Notes

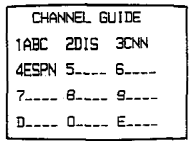
- You cannot use CHANNEL CAPTION while the TV is in VIDEO or S VIDEO mode. Before setting captions, select TV mode by pressmg TV/VIDEO.



Viewing the captioned channels — CHANNEL GUIDE

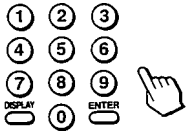
Use this feature to display the captions you have set, and to select a channel directly for viewing.

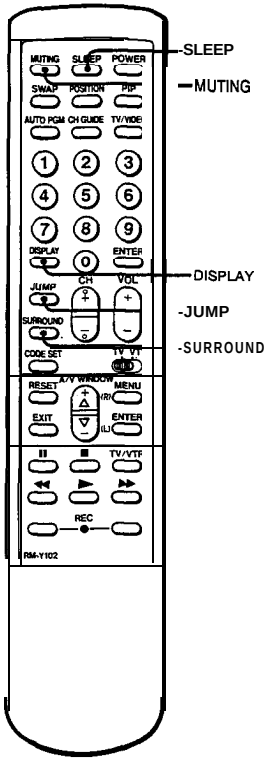
1 **Press CH GUIDE.**
A directory appears. corresponding to the directory keys on the Remote Commander.



To cancel the CHANNEL GUIDE screen
Press CH GUIDE again.

2 **Press the directory key of the channel you want to watch.**





Muting the sound — MUTING

Press MUTING.
The display "MUTING " will *appear on the screen.*
To restore the sound
Press MUTING again, or press VOL+

Keeping the channel displayed — DISPLAY

To display the channel
Press DISPLAY.
All the current displays will appear for 3 seconds, then disappear. The channel display will remain on the screen.

To cancel the display
Press DISPLAY again.
The channel display will disappear.

Listening to surround sound — SURROUND

Gives sound reproduction with the atmosphere of a movie theater or a concert hall.

To set
Press SURROUND
The display ⇨ will appear on the screen for a few seconds.

To cancel
Press SURROUND again.
The display ⇨ will appear for a few seconds.

Usmg the sleep timer — SLEEP

Turns TV off automatically about 1 hour after setting.
Press SLEEP

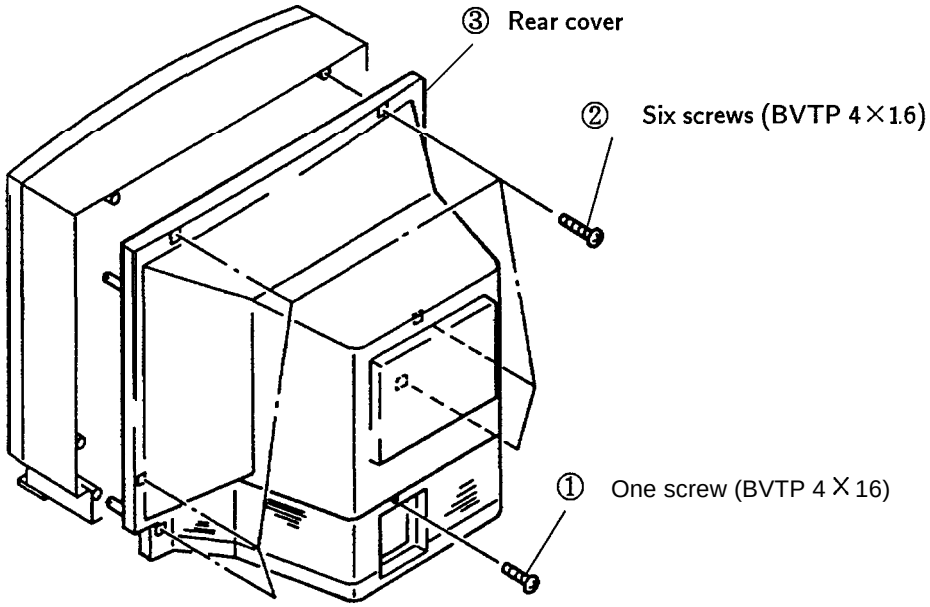
A green "SLEEP *ON* " *display appears for a few seconds.*
(A *red* "SLEEP " *display will appear1 minute before the TV shuts off.)*
To cancel the setting
Press SLEEP again.
A green "SLEEP OFF" *display* appears *for a few seconds.*
O R
Turn the TV off.
The sleep timer setting will be cancelled.

Switching quickly between 2 channels — JUMP

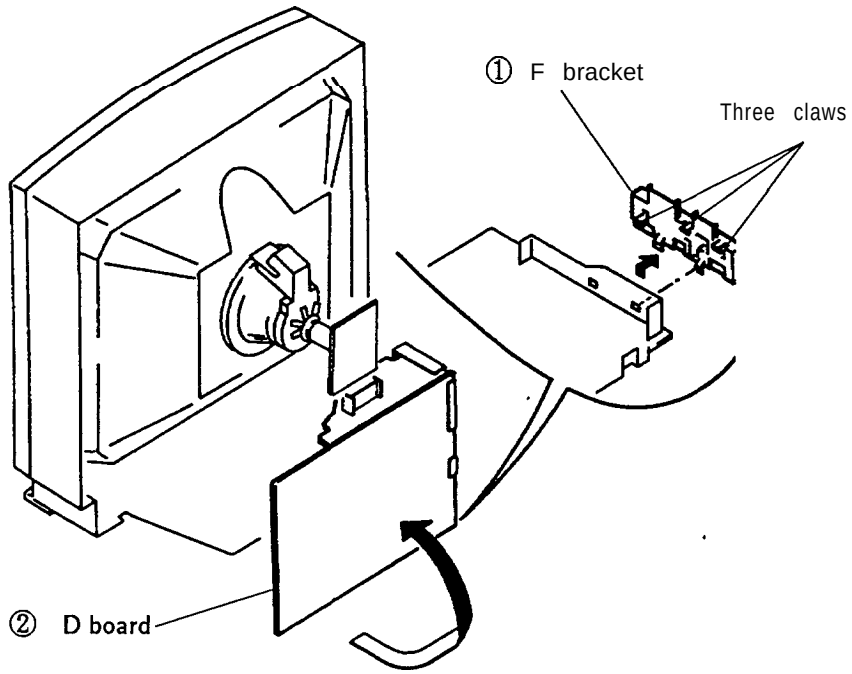
Press JUMP once to recall the channel you were watching previously; press JUMP again to switch back. Use this feature to keep track of two programs alternately.

SECTION 2
DISASSEMBLY

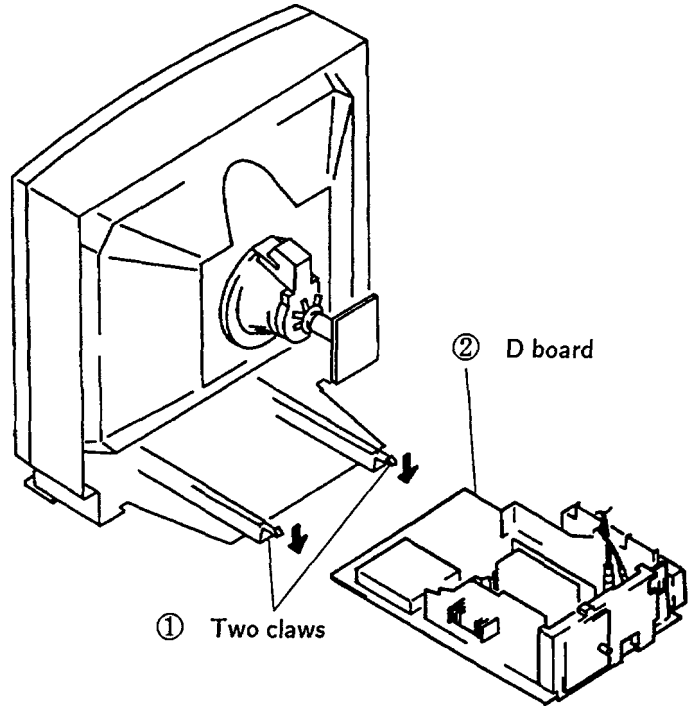
2-1. REAR COVER REMOVAL



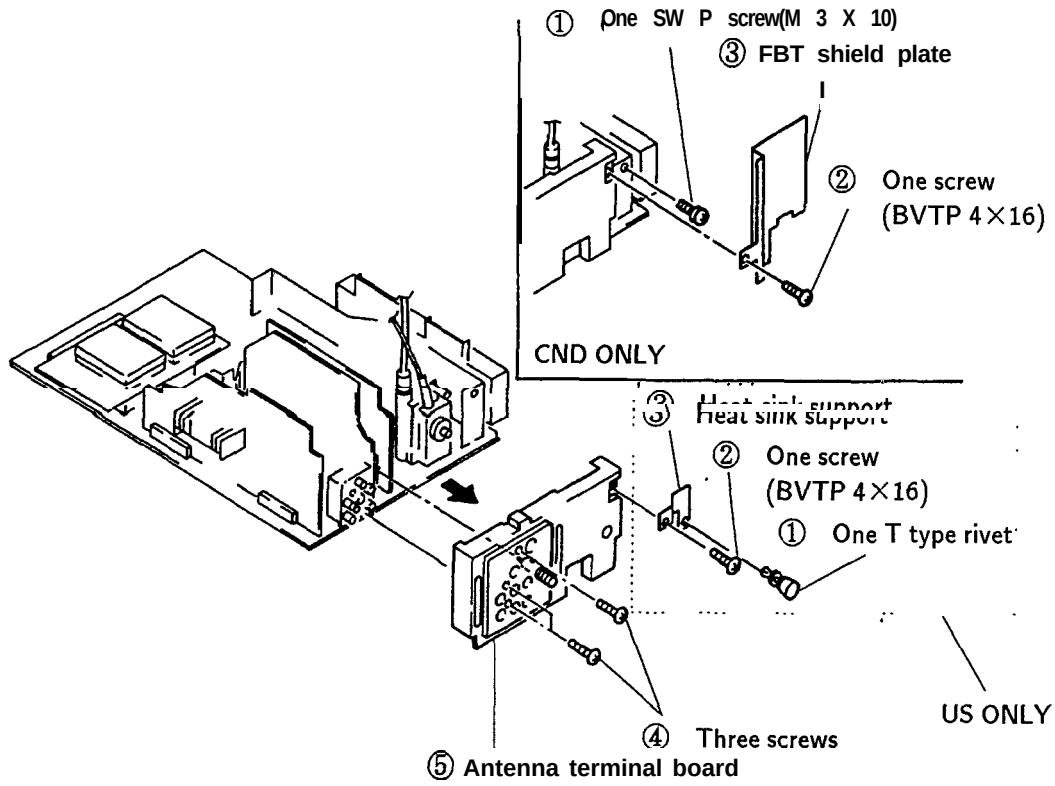
2-2. SERVICE POSITION



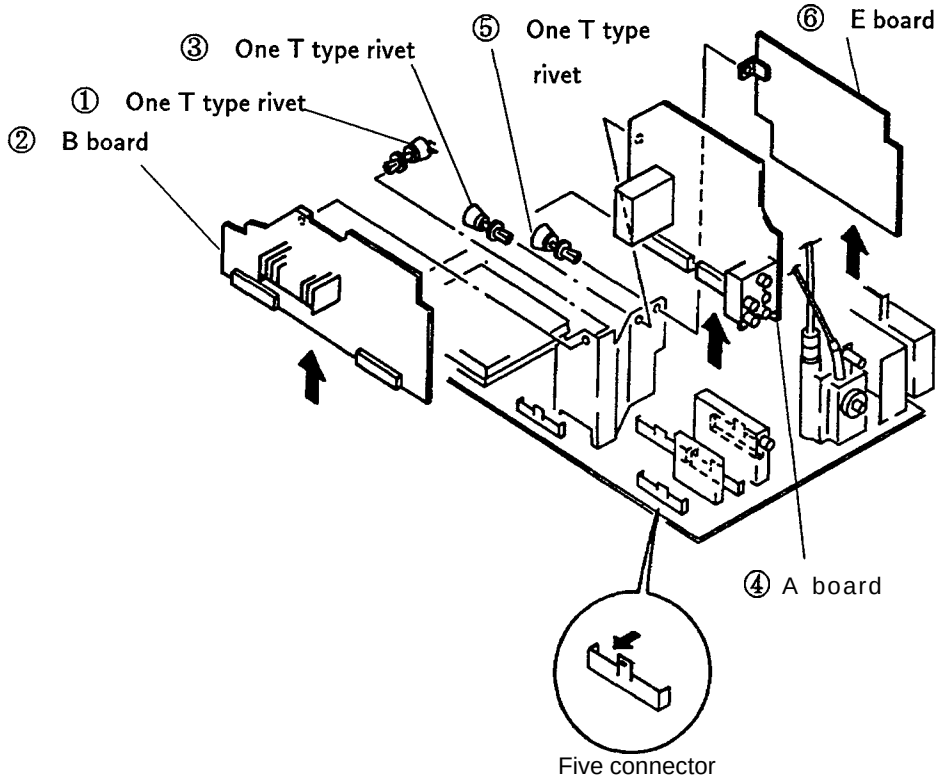
2-3. D BOARD REMOVAL



2-4. ANTENNA TERMINAL BOARD REMOVAL

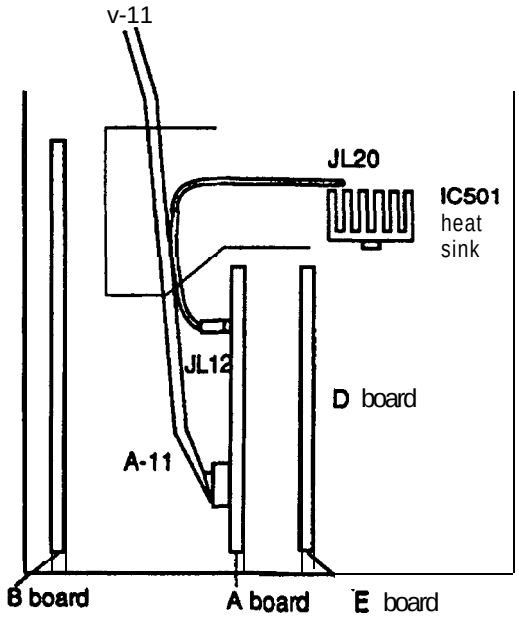


2-5. B,A AND E BOARDS REMOVAL



2-6. HOW TO IMPROVE INTERLACE

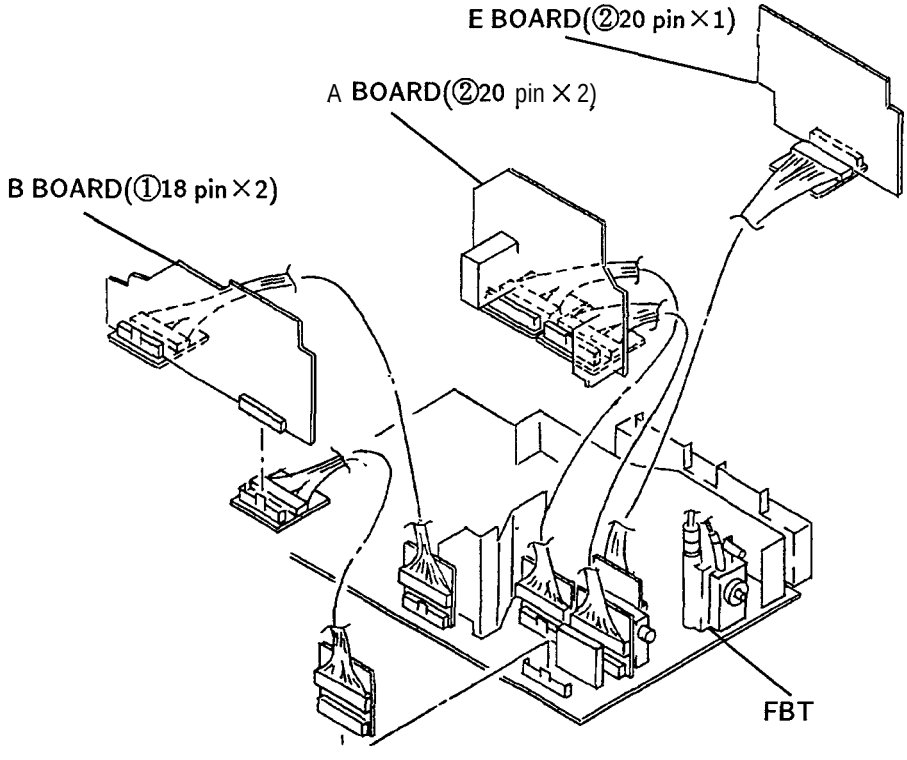
Fastening Jumper Connector Wire between JL 12(A board)and JL 20(D board).



Fasten the wire to eriminate slack between JL 20 and JL 12 with a purse lock.

2-7. **B,A** AND E BOARDS SERVICE POSITION

※ KEEP THE EXTENDED BOARDS FURTHER AWAY FROM FBT TO PREVENT INTERFERENCE.



[EXTENSION **CABLES FOR A,B** AND E **BOARD**]

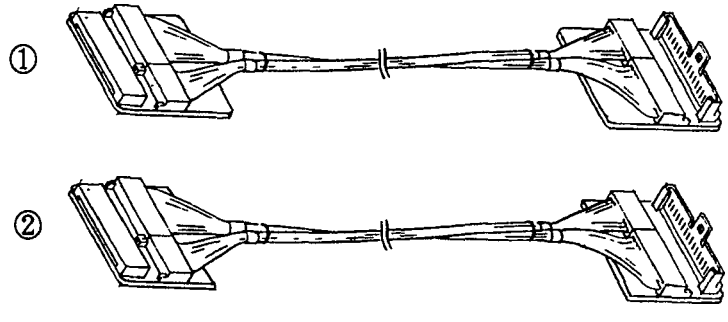
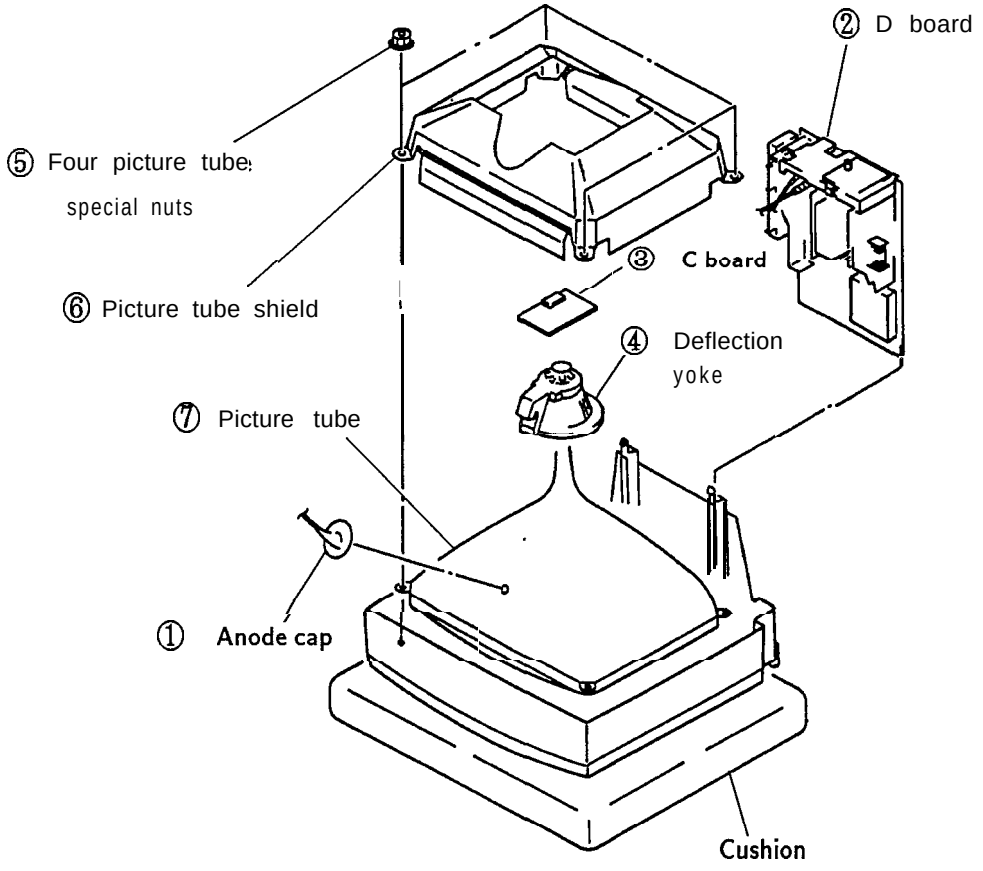


FIG	DISCLIPTION	QTY	USE FOR	PART NO
①	18 PIN-18 PIN(H 1,H 2)	2	B BOARD	3-702-541-01
② 20	PIN-20 PIN(H 3,H 4)	2	A BOARD	3-702-542-01
		1	E BOARD	

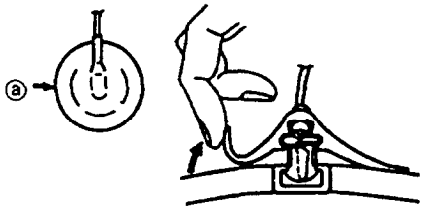
2-8. PICTURE TUBE REMOVAL



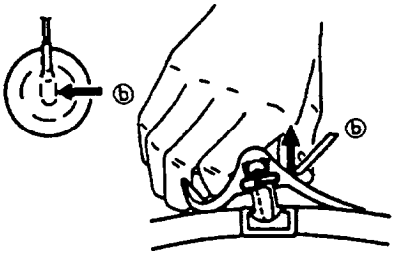
• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT chield or carbon painted on the CRT, after removing the anode.

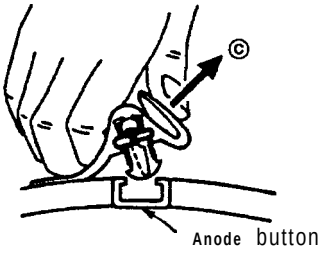
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



② Using a thumb pull up the rubber cap firmly in the direction indicated by' the arrow ⓑ.



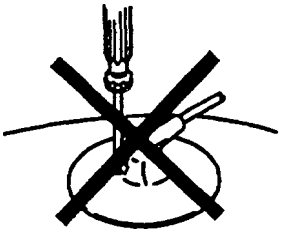
③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

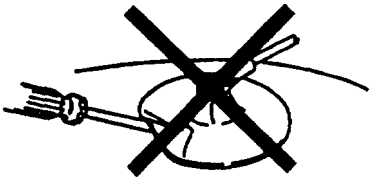
. HOW TO HANDLE AN ANODE-CAP

① **Don't hurt the surface of anode-caps with sharp shaped material!**

② **Don't press the rubber hardly not to hurt inside of anode-caps!**
A material fitting called as shatter-hook terminal is built in the rubber.

③ **Don't turn the foot of rubber over hardly!**
The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted :

PICTURE control . . . . . RESET

BRIGHTNESS control . . . . . center

Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
   Contrast, Bightness } normal
2. Set the pattern generator raster signal to red.
3. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.
   (See Figures 3-l through 3-3.)
4. Move the deflection yoke forward and adjust so that entire screen is red. (See Figure 3-l.)
5. Switch the raster signal to blue, then to green and verify the condition.
6. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
7. If the beam does not land correctly in all the corners, use a magnet to adjust it.
   (See Figure 3-4.)

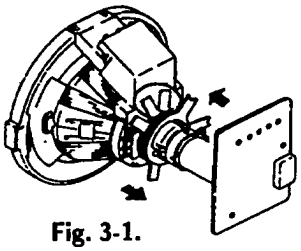


Fig. 3-1.

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

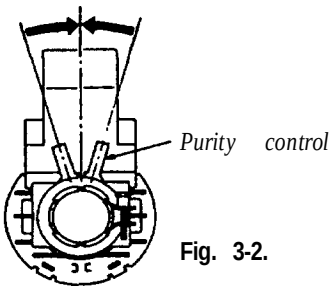


Fig. 3-2.

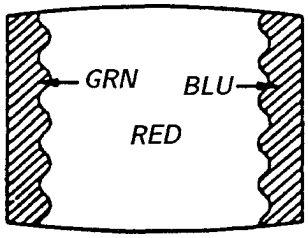


Fig. 3-3.

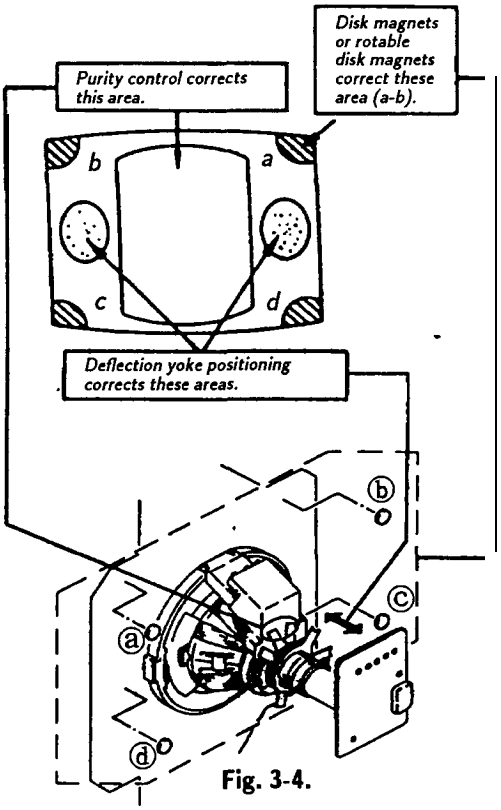


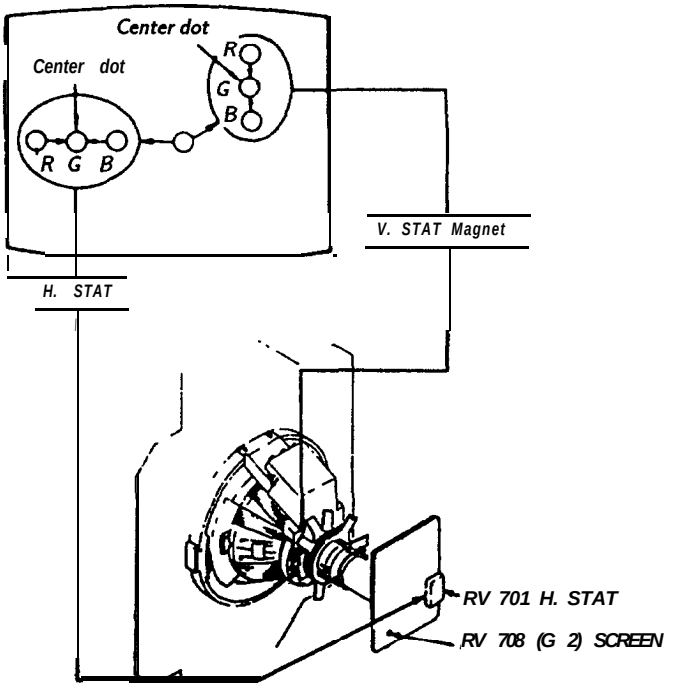
Fig. 3-4.

3-2. CONVERGENCE

Preparation :

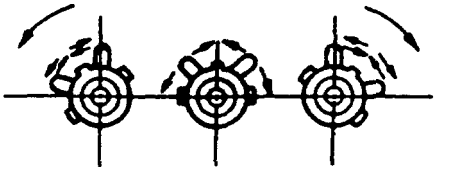
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

(1) **Horizontal and Vertical Static Convergence**

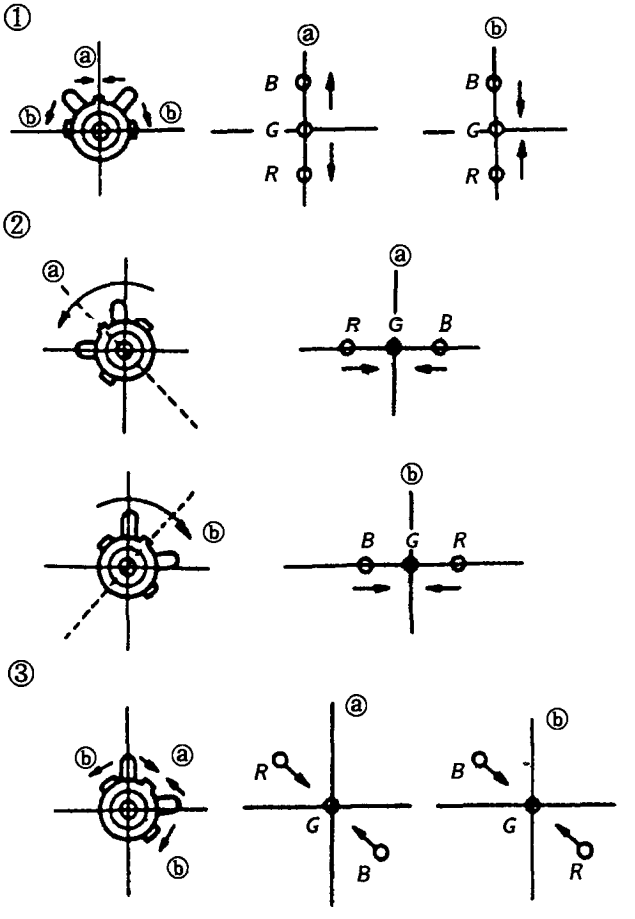


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below.
   (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

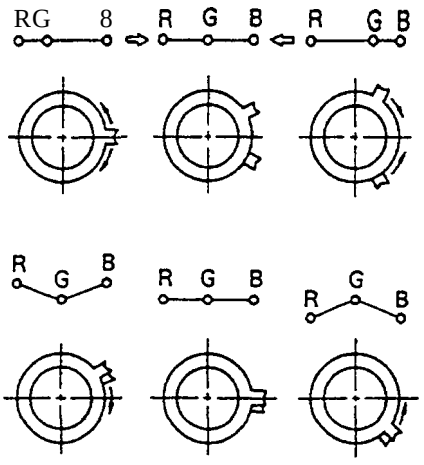
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



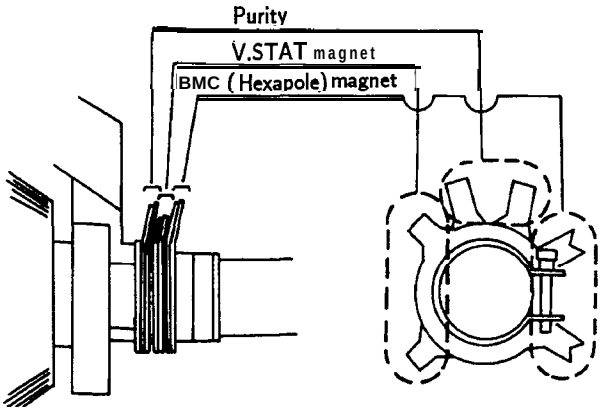
4. If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet



- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
  Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

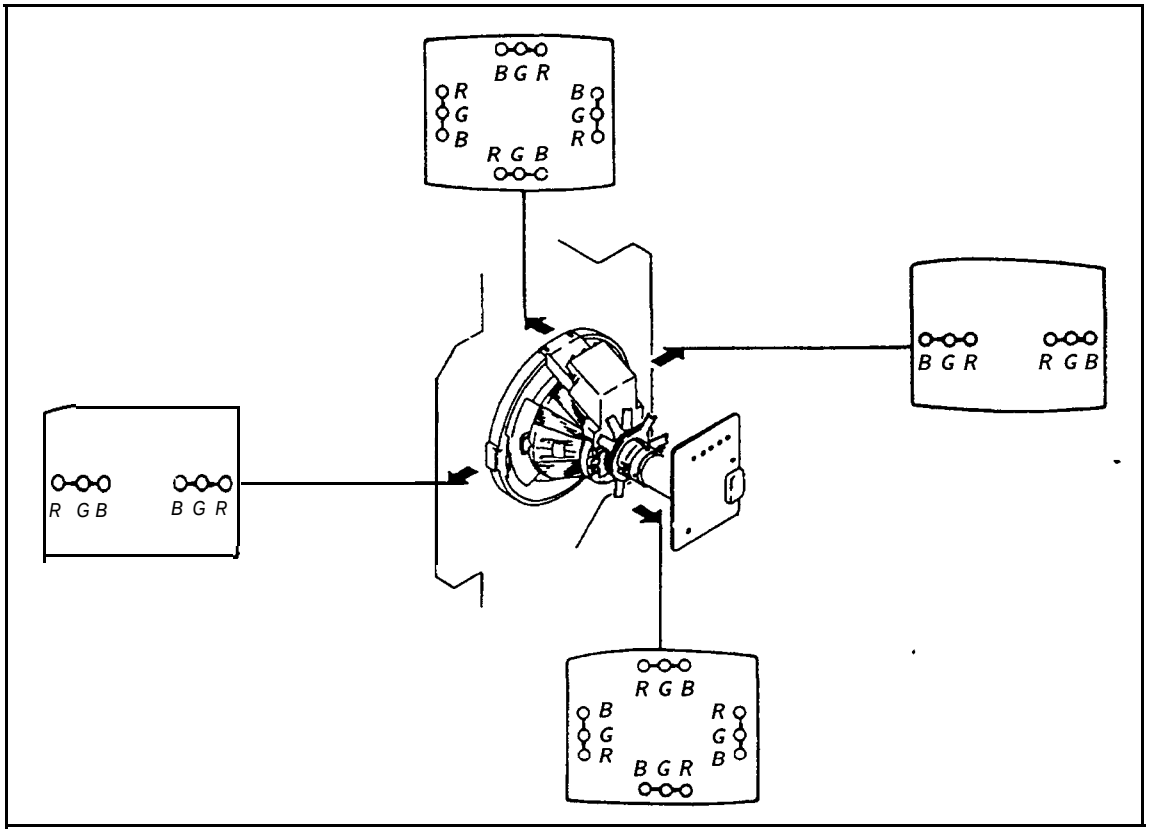


(2) Dynamic Convergence Adjustment

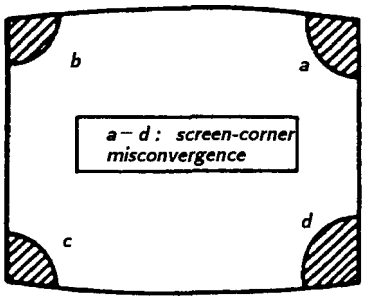
Preparations :

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the defelection yoke spacer.

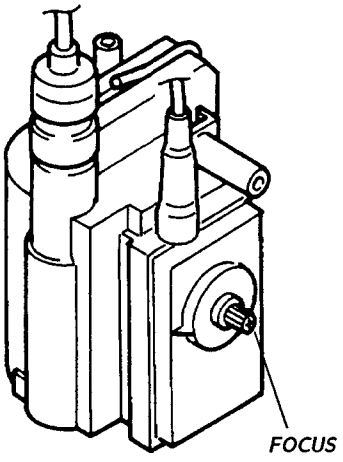


(3) Screen-corner Convergence

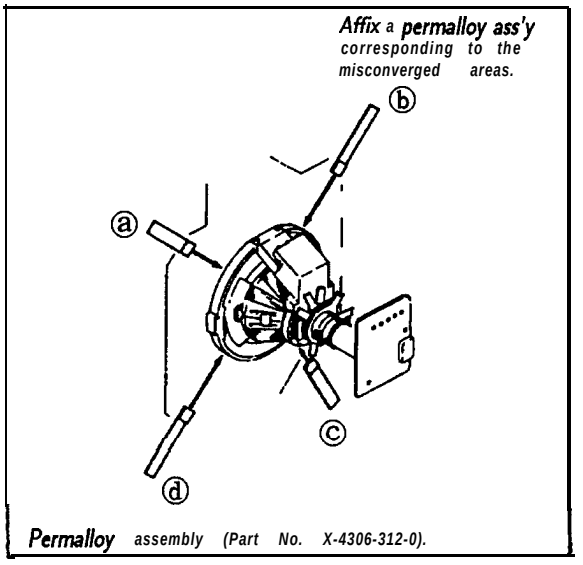


3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for a best focus.



FLYBACK TRANSFORMER (T 503)



3-4. WHITE BALANCE

[Screen G 2 setting]

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 180 V DC to the R, G, and B cathodes with an external power supply.
4. While watching the picture, adjust G 2 control RV 708 (Screen) to the point just before the return lines disappear.

[White balance adjustment]

1. Input an all-white signal from the pattern generator.
2. Set the picture brightness and color controls to their normal levels.
3. Use the RV 703 (B Drive) and RV 705 (G Drive) to adjust white balance.

In the adjustments below, have the picture color and brightness settings at their normal levels unless there is a specific instruction to the contrary.

SECTION 4
SAFETY RELATED ADJUSTMENTS

☒ R542 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

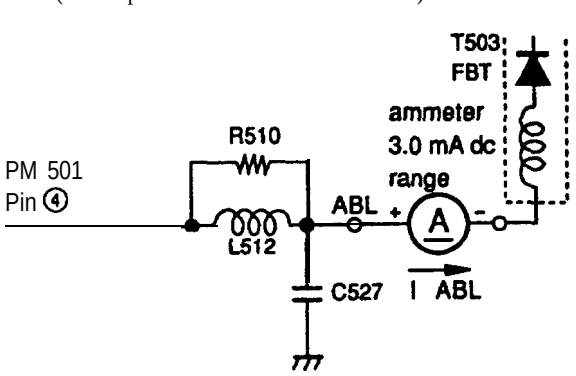
The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).

IC601,Q605,Q606,C536,R542,R546,R620,R621,R629, R630,R639,PM501

①

1. Preparation before confirmation
   1) Remove R620 on the D board and connect a variable resistor (RV1 : about 20kΩ) between pin ① of IC601 and B+ line.
   2) Supply 120±2.0V AC to with variable auto-transformer.
2. Hold-down operation confirmation
   1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1650 ± 20 μA with PICTURE and BRIGHT etc controls.
   2) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 144.0V DC whereby the raster disappears during operation of hold-down circuit.
      NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
   3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to 150±20μA with PICTURE and BRIGHT etc controls.
   4) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the miniium voltage is less than 148.0V DC whereby the raster disappears during operation of hold-down circuit.
      NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R542 (a component marked with ❑).



☒ R543 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).

IC601,Q605,Q606,D507,C535,C536,C639,R520,R543, R546,R620,R621,R629,R630,T503,PM501

②

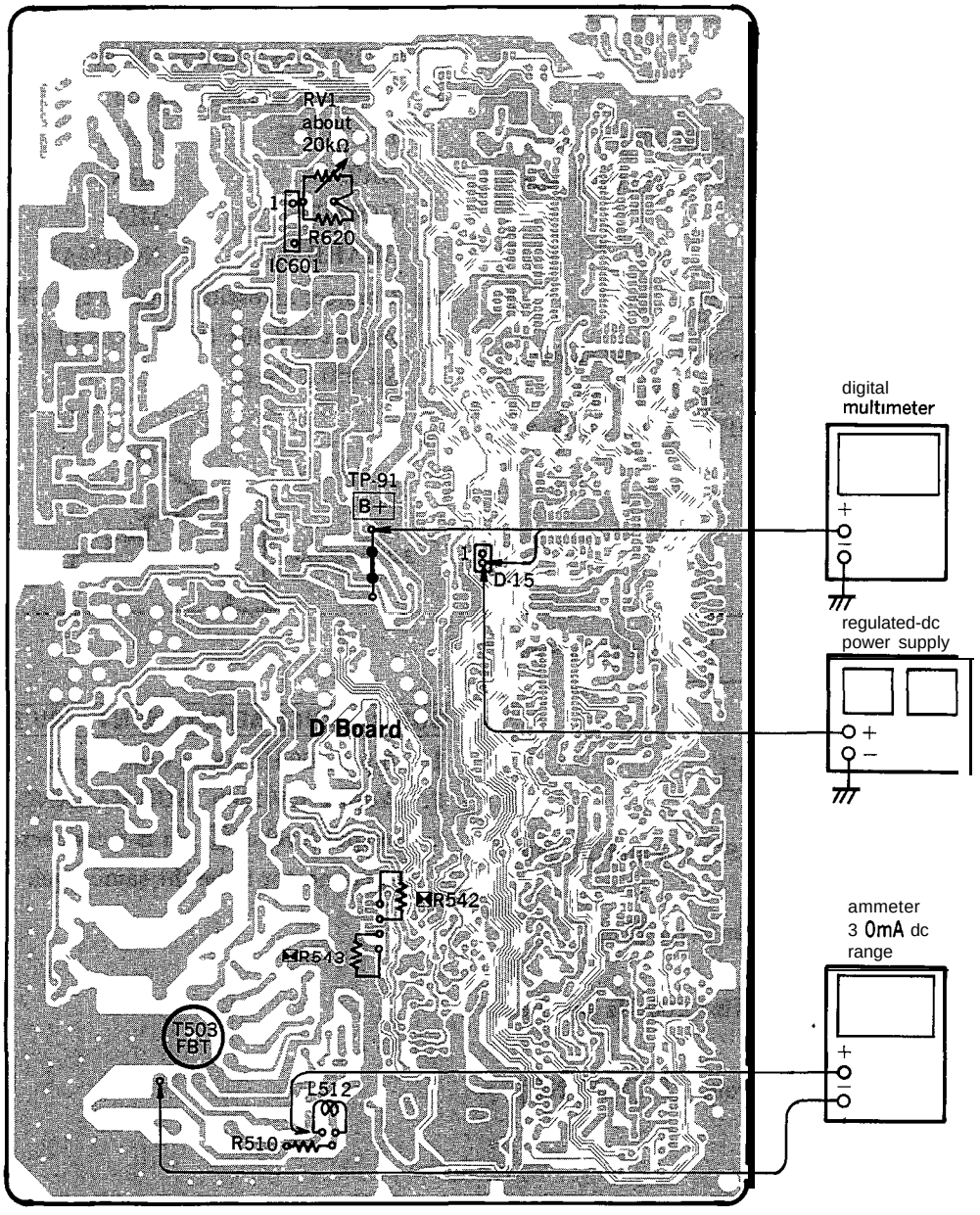
1. Preparation before confirmation
   1) Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHT controls to maximum.
   2) Confirm that voltage of the check terminal of pin① of D-15 is more than 115.0V DC when the set is operating normally with 120.0±2.0V AC supply.
2. Hold-down operation confirmation
   1) Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1650 ± 20 μA with PICTURE and BRIGHT etc controls.
   2) Apply DC voltage of over 130V DC gradually to the check terminal of pin① of D-15 via 1T40 from the DC stabilized power source.
      Confirm that the minimum voltage is less than 140.0V DC whereby the raster disappears during operation of hold-down circuit.
      NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
   3) Turn the POWER switch ON, and receive dot signals and adjust ABL current to 150±20μA with PICTURE and BRIGHT etc controls.
   4) Apply DC voltage of over 130V gradually to the check terminal of pin① of D-15 via 1T40 from the DC stabilized power source.
      Confirm that the minimum voltage is less than 140.5V DC whereby the raster disappears during operation of hold-down circuit.
      NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R543 (a component marked with 8).

B+ VOLTAGE CONFIRMATION

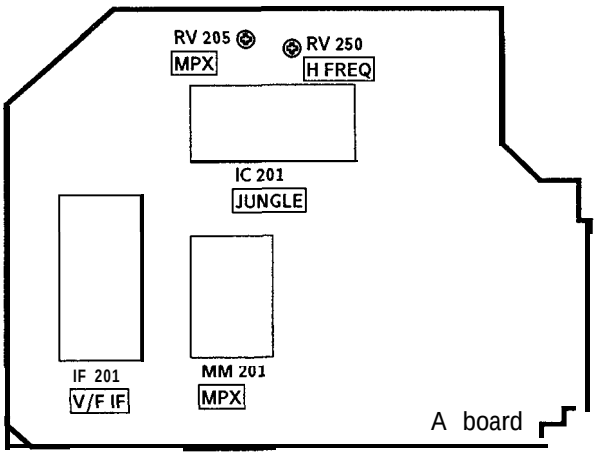
The following adjustments should always be performed when replacing IC601 and R620.

1) Supply $130 \pm {}^{2}_{0}$V AC to with variable auto-transformer.
2) Receive entirely monoscope signal.
3) Set the PICTURE control and the BRIGHT controls in to initial reset.
4) Confirm the voltage of TP-91 is less than 137.0V DC.
5) If step 4) is not satisfied, replace IC601 and R620 repeat above steps.



SECTION 5
CIRCUIT ADJUSTMENTS

5-1. A BOARD ADJUSTMENTS

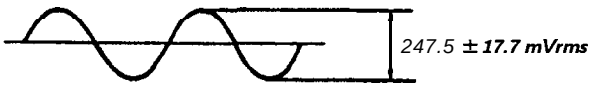


[RF ACC ADJUSTMENT1

1. Receive an off-air signal.
2. Adjust AGC VR (AGC VR of IF 201) so that snow noise and cross-modulation just disappear from the picture.

MPX LEVEL ADJUSTMENT (RV 205)

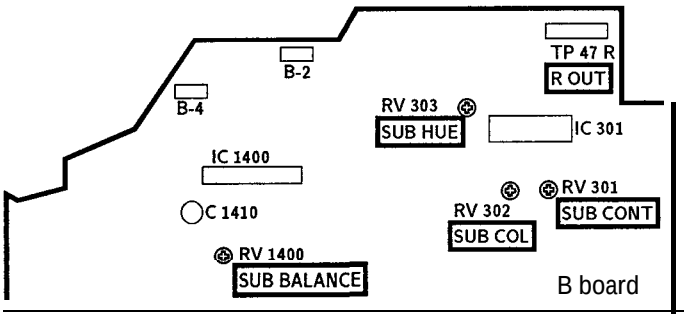
1. Receive 400 Hz (100% modulation) sound signal.
2. Connect an RMS meter to pin ⑪ of MM 201.
3. Adjust RV 201 so that the MPX level is 247.5 ± 17.7 mVrms.



[H. FREQ ADJUSTMENT (RV 250)

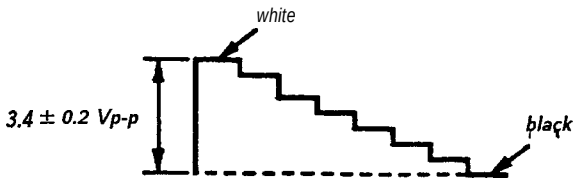
1. Receive an off air signal.
2. Short circuit between TP (Y SYNC) and TP (12 V) with a jumper wire.
3. Connect the frequency counter to pin@ of connector A-3.
4. Adjust RV 250 for 15.734 kHz ±60 Hz on the frequency counter.
5. Disconnect a jumper wire from TP (Y SYNC) and TP (12 V).

5-2. B BOARD ADJUSTMENTS



SUB CONTRAST ADJUSTMENT (RV 301)

1. Receive a color-bar signal.
   PICTURE. MAX
   BRT..... MIN
   COLOR..... MIN
   SHARP----- NORMAL
2. Connect an oscilloscope to the TP 47 R(R OUT).
3. Adjust RV 301 (SUB CONT) so that voltage is 3.4 to.2 vp-p.

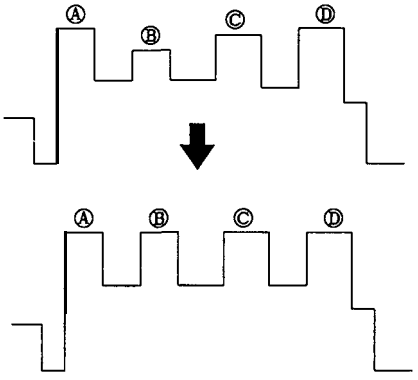


SUB BALANCE ADJUSTMENT (RV 1400)

1. Input 400 Hz 200 mVrms signal.
2. Adjust RV 1400 (SUB-BALANCE) so that the output level of ② pin B-4 connector and ① pin B -2 connector to be the same level.

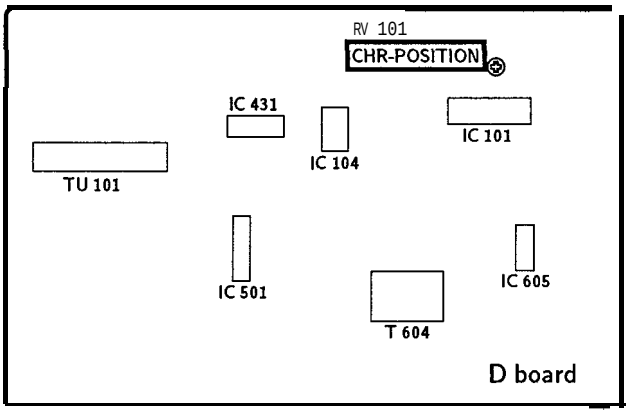
SUB COLOR AND SUB HUE ADJUSTMENTS (RV 302,303)

1. Receive a color bar signal.
2. Set PICTURE and BRT to normal.
3. Connect an oscilloscope to the TP 47 R (B OUT).
4. Adjust RV 302(SUB-COL)and RV 303 (SUB-HUE) to be the same level.



Ⓐ=Ⓓ
Ⓑ=Ⓒ

5-3. D BOARD ADJUSTMENTS



CHARACTER POSITION (RV 101)

1. Receive a color-bar signal.
2. Set the PICTURE control to maximum setting and set the BRIGHTNESS control to center click position.
3. Press the PICTURE control button until this picture level becomes maximum.
4. Adjust RV 101 as shown in Fig. 1.

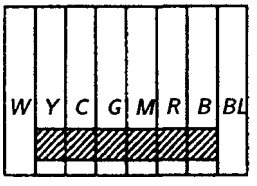
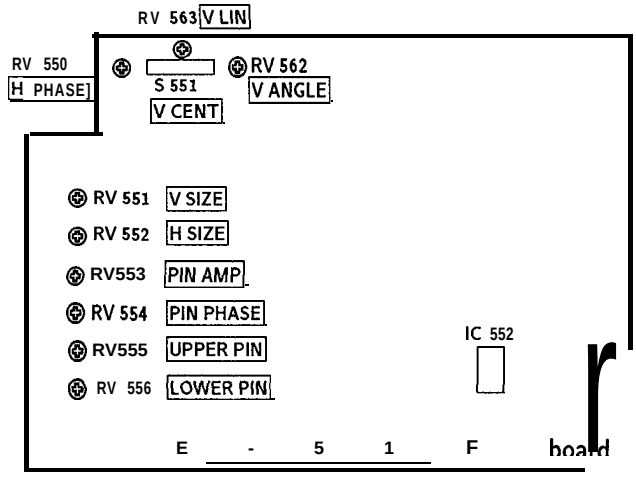


Fig. 1

5-4. E BOARD ADJUSTMENTS



H.PHASE (HORIZONTAL PHASE) (RV 550)

1. Receive monoscope signal.
2. Adjust H-SIZE min.
3. Turn H-PHAZE VR until area "C" moves in the arrow direction and coinside with the edge of area "E" (DOTTED AREA) (Fig.1)

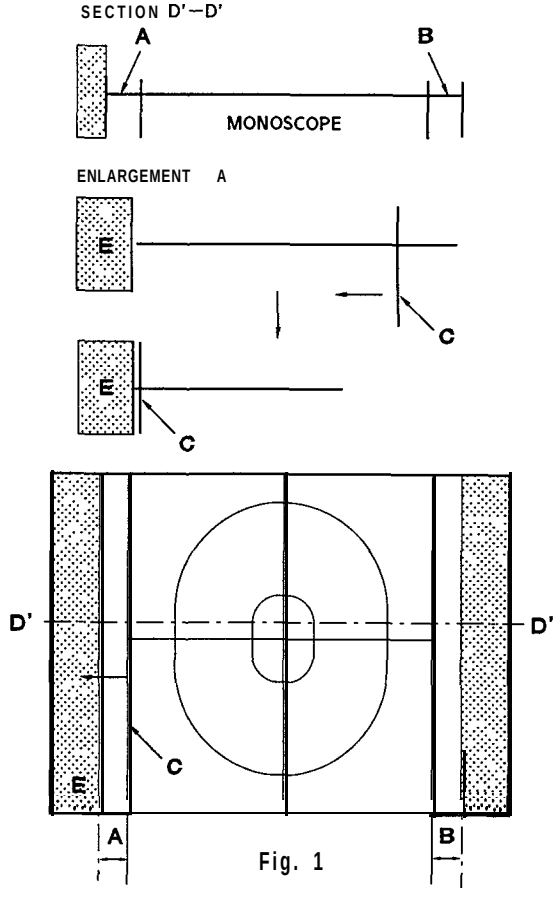
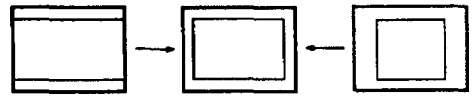
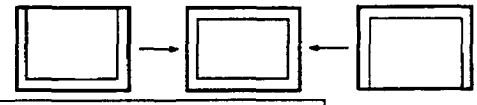


Fig. 1

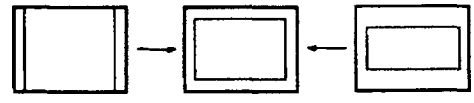
H. SIZE (HORIZONTAL SIZE) (RV552)



V. CENT (VERTICAL CENTER) (S551)

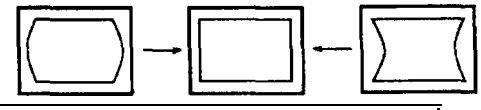


V. SIZE (VERTICAL SIZE) (RV551)

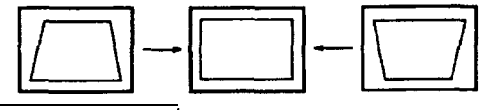


V. ANGLE (VERTICAL ANGLE) (RV562)

PIN. AMP (PINCUSHION AMPLIFIER) (RV553)



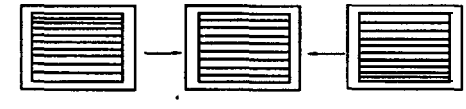
PIN. PHASE (PINCUSHION PHASE) (RV554)



UPPER PIN (RV555)

LOWER PIN (RV556)

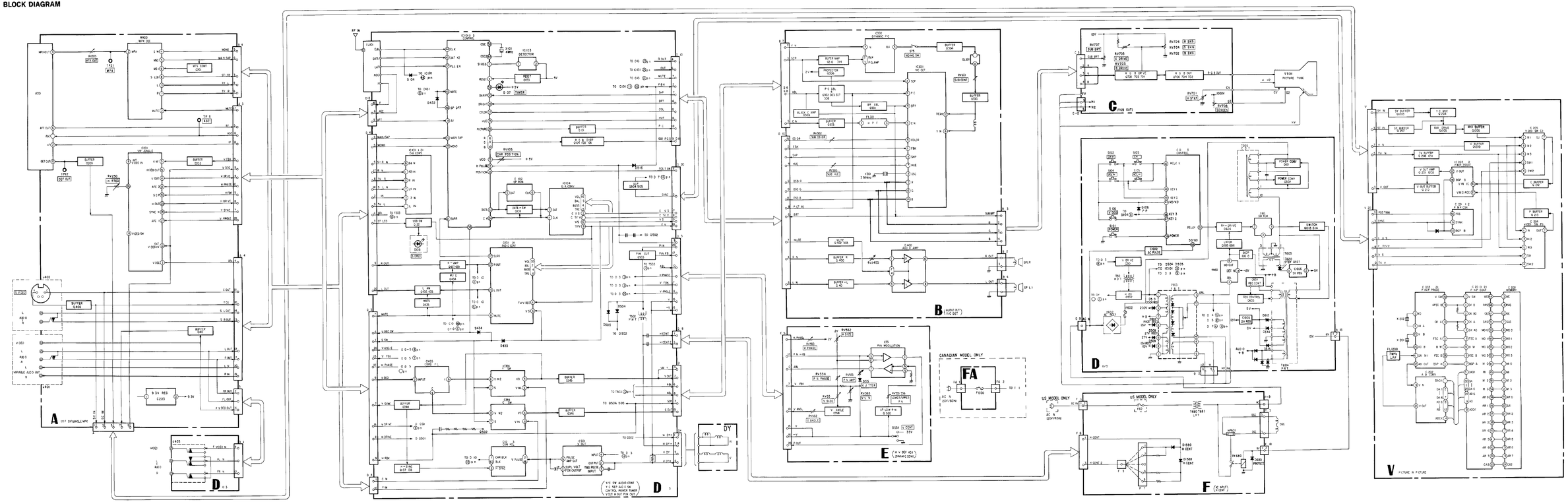
V.LIN (VERTICAL LINEARLITY) (RV 563)



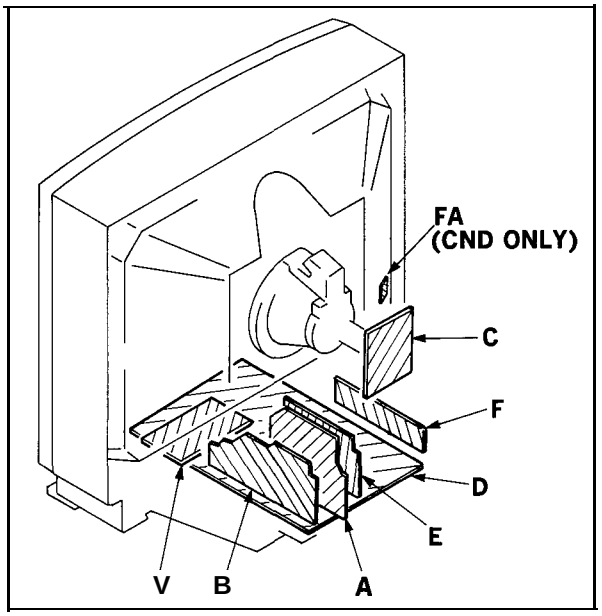
KV-27TS35 KV-27TS35
RM-Y102

SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM



6-2. CIRCUIT BOARDS LOCATION



6-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power 1/4W
- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- △: internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors havecharacteristic curve B, unless otherwise noted.
- The components identified by ❑ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⊠ and repeat the adjustment until the specified value is achieved.
  (Refer to R542 and R543 on page28-29 in the Service Manual.)
- When replacing the part in below table be sure to par-form the related adjustment.

Part replaced (❑)	Adjustment (8)
IC601, PM501 , Q605, Q606, C536, R639, R630, R629, R621, R620, R546, R542,	R542 (HOLD-DOWN)
IC601, PM501, Q606, Q605, D507, T503, C639, C536, C535, R630, R629, R621, R620, R543, R546, R520	R543 (HOLD-DOWN)

- All voltages are in V.
- Voltagearedcwith respecttoground unlessotherwise noted.
- Readings are taken with a 10 MΩ digital multimeter
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerance.
- ▬▬. B+ bus.
- : signal path

Reference information

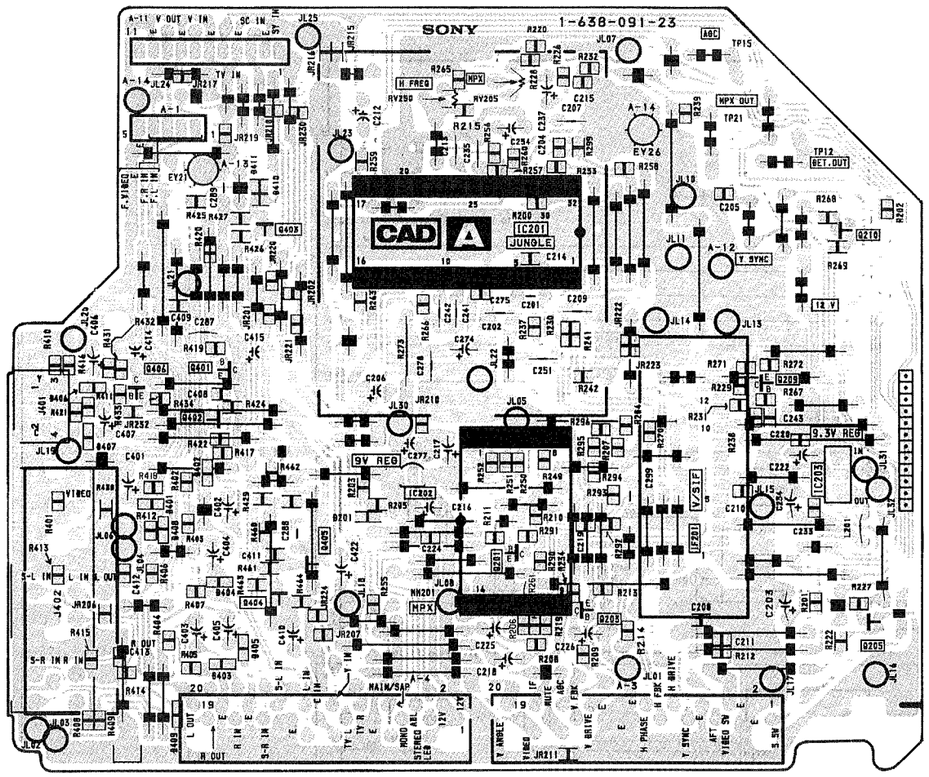
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLEWIREWOUND
	: RS	NONFLAMMABLEMETALOXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note:
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

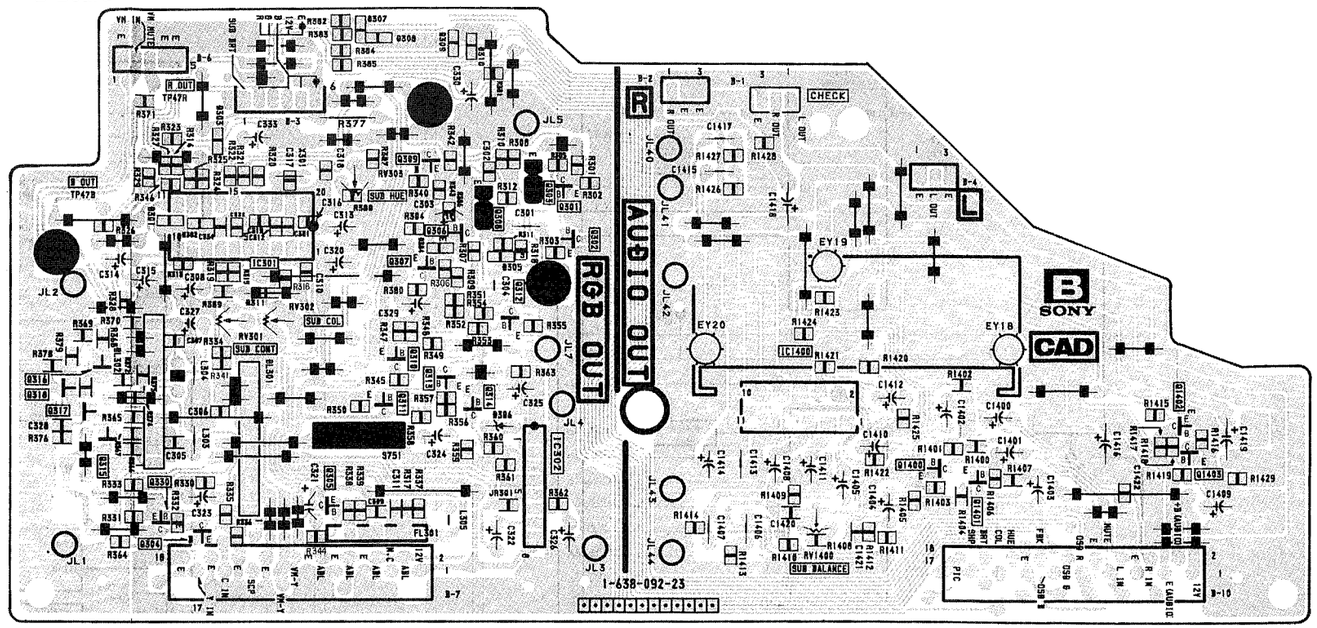
Note:
Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

A [JUNGLE, VIF/SIF, MPX] **E** [H/V DEF. ADJ.] **B** [Y/C → RGB AUDIO OUT] **F** [AC INPUT H. CENT] **FA** [AC OUTPUT]

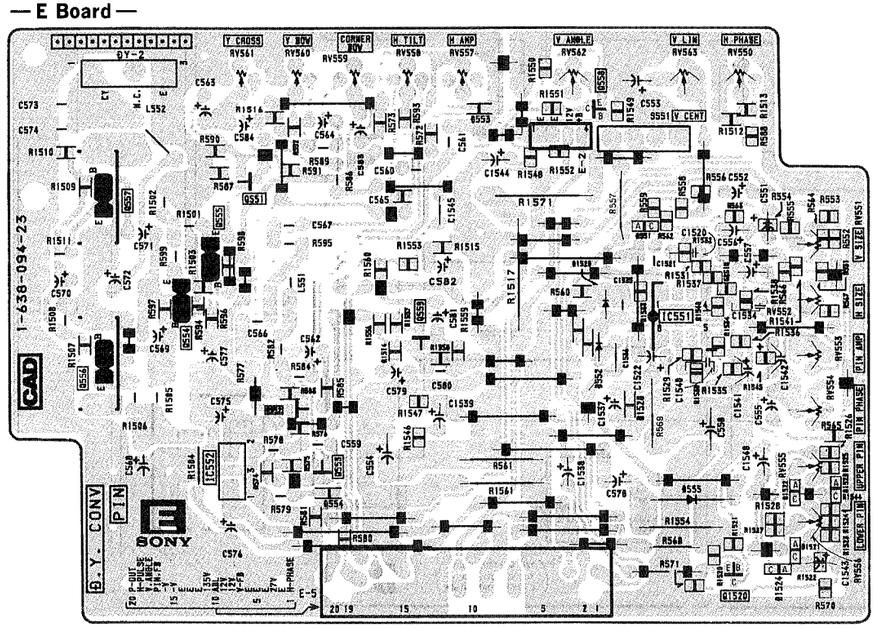
— A Board —



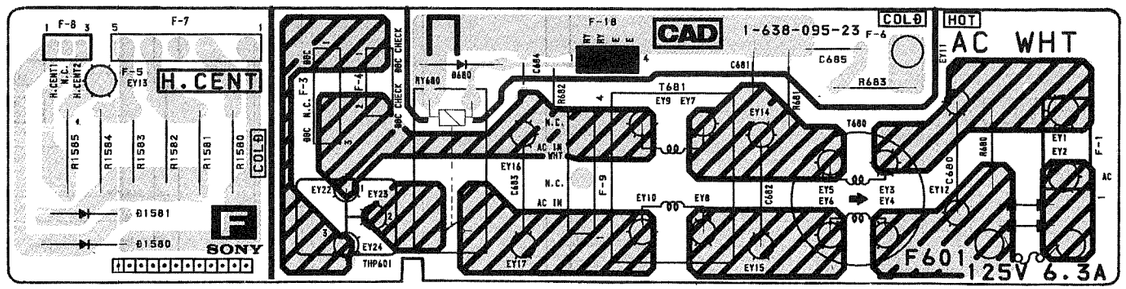
— B Board —



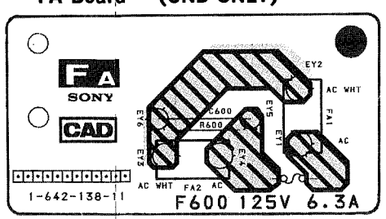
— E Board —

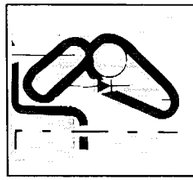


— F Board —

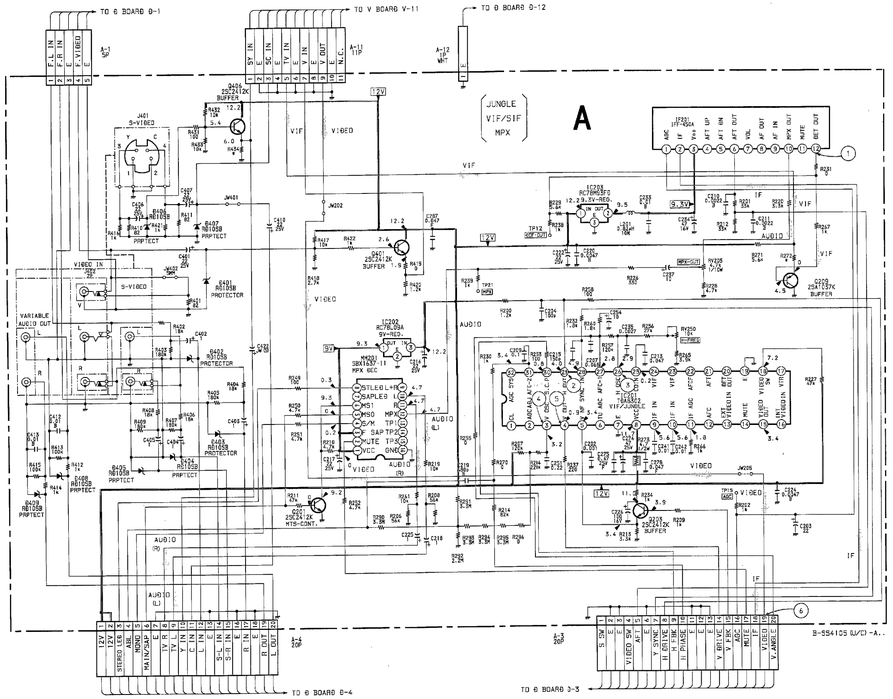


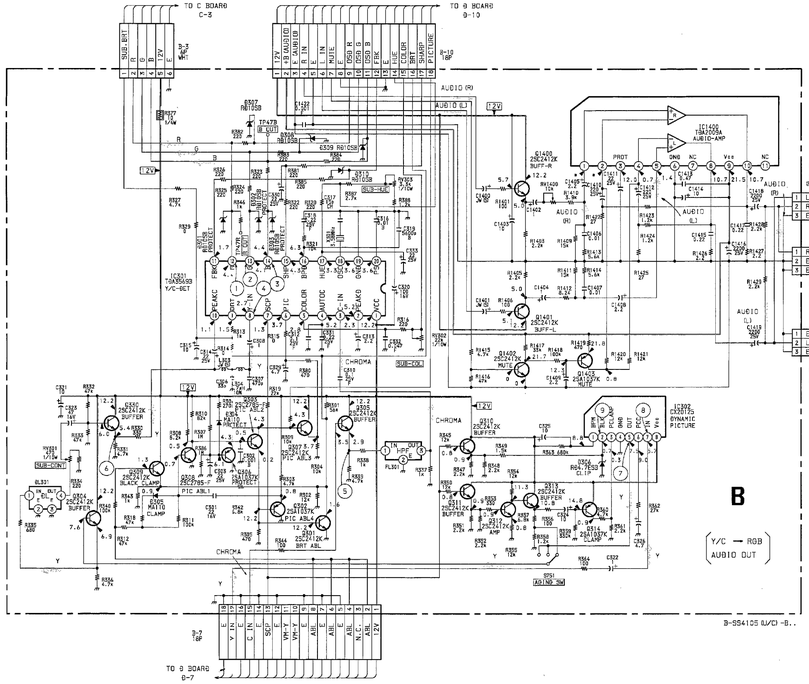
— FA Board — (CND ONLY)

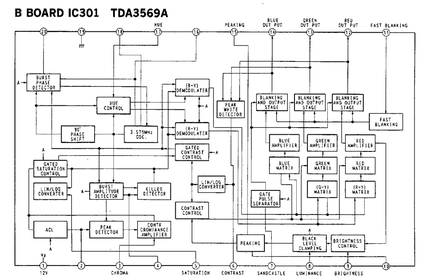


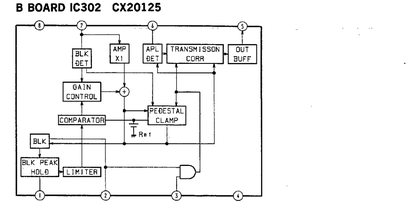


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.





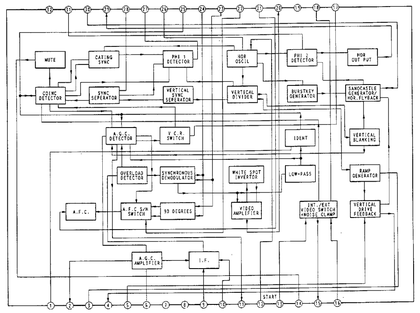


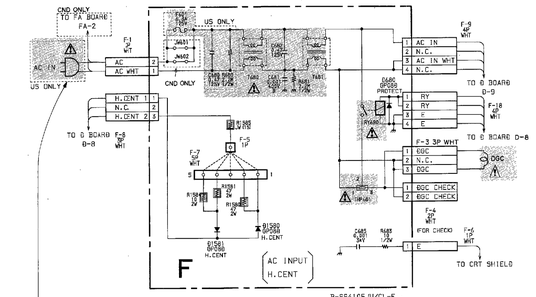


— B Board —

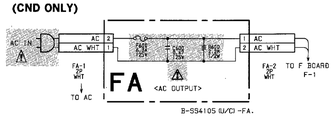
① 6 Vp-p (H)	② 4.8 Vp-p (H)	③ 4.8 Vp-p(H)
④ 0.4 Vp-p (H)	⑤ 1.9 Vp-p (H)	⑥ 0.45 Vp-p (H)
⑦ 1 Vp-p (H)	⑧ 1.1 Vp-p (H)	⑨ 4.4 Vp-p (H)

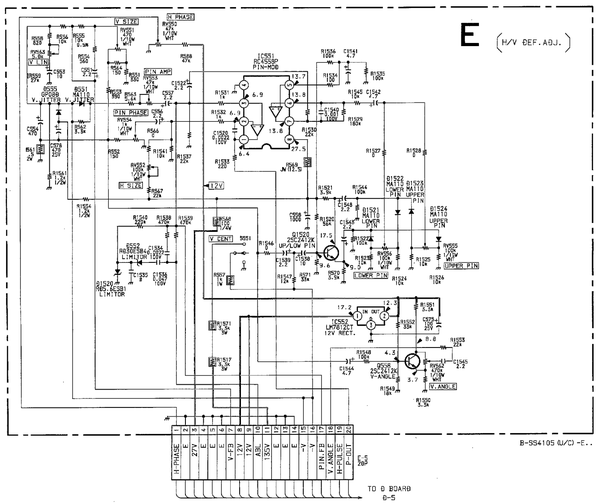
A BOARD IC201 TDA8302





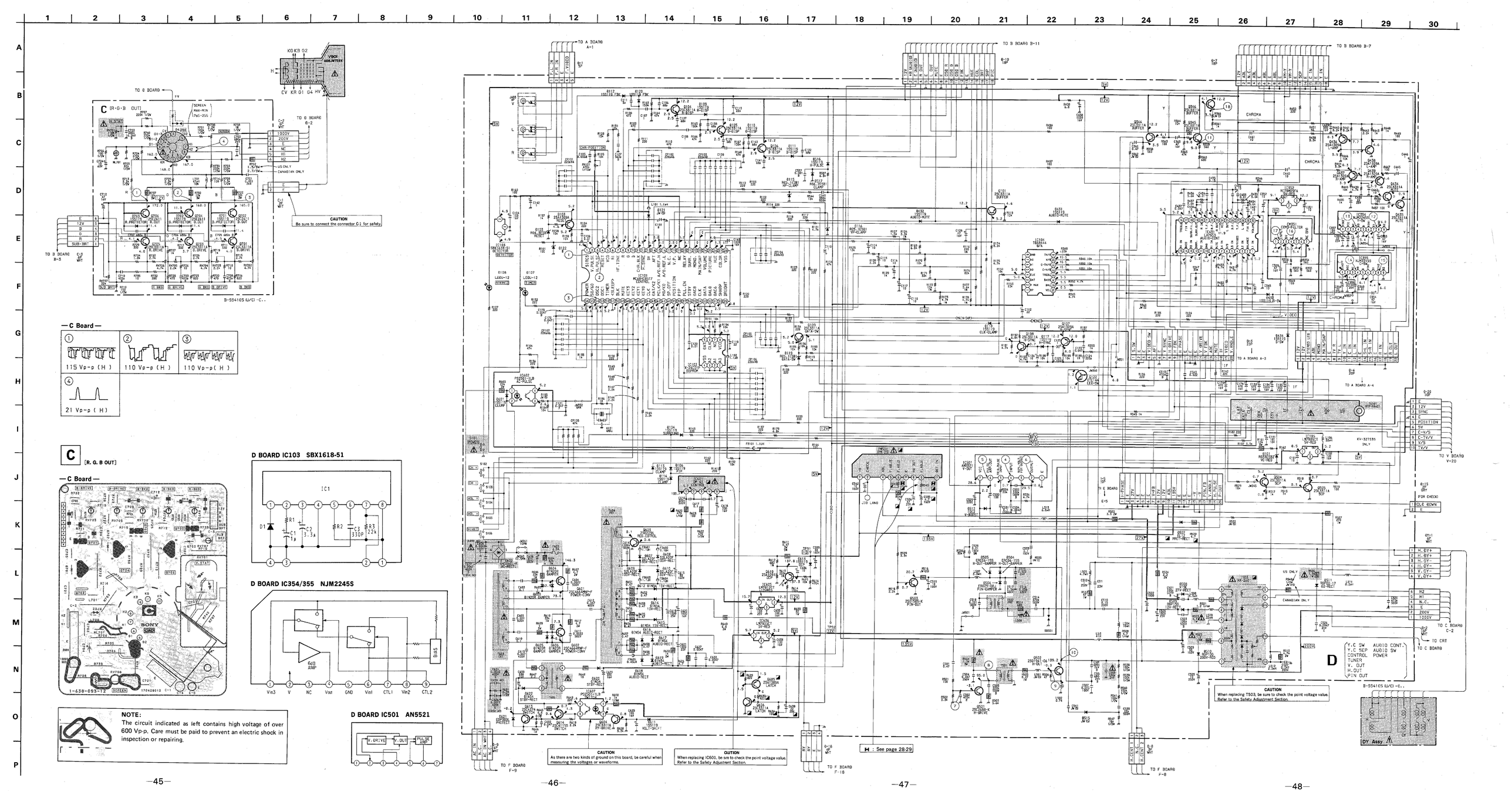
CAUTION
This set is equipped with a polarized ac power cord plug (one blade of the plug is wider than the other.) When replacing the ac power cord, be sure to connect it with specified part number as shown in this diagram.



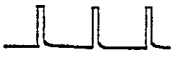
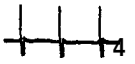
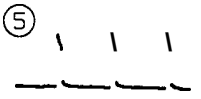
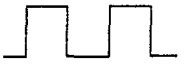
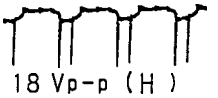
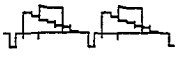
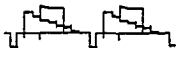
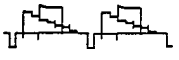


— A Board —

① 1.95 Vp-p (H)	② 8 Vp-p (H)	③ 2 Vp-p(H)
④ 1.8 Vp-p (V)	⑤ 2.1 Vp-p (V)	⑥ 2 Vp-p (H)


C [R·G·B OUT]
TO G BOARD
TO B BOARD B-5
TO G BOARD G-2
CAUTION
Be sure to connect the connector C-1 for safety.
US ONLY
CANADIAN ONLY
— C Board —
115 Vp-p (H)
110 Vp-p (H)
110 Vp-p (H)
21 Vp-p (H)
D BOARD IC103 SBX1618-51
D BOARD IC354/355 NJM2245S
D BOARD IC501 AN5521
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.
TO A BOARD A-1
TO B BOARD B-11
TO B BOARD B-7
TO A BOARD A-3
TO A BOARD A-4
TO V BOARD V-20
TO E BOARD E-5
TO C BOARD C-2
TO CRT
TO F BOARD F-9
TO F BOARD F-18
TO F BOARD F-8
CAUTION
As there are two kinds of ground on this board, be careful when measuring the voltages or waveforms.
CAUTION
When replacing IC601, be sure to check the point voltage value. Refer to the Safety Adjustment Section.
CAUTION
When replacing T503, be sure to check the point voltage value. Refer to the Safety Adjustment Section.
D
Y.C SW
Y.C SEP
CONTROL
TUNER
V. OUT
H.OUT
PIN OUT
AUDIO CONT.
AUDIO SW
POWER
DY Assy
: See page 28-29

-D Board —

① 	② 5 V P-P (H)	③ 5 V P-P (4MHz)
④  3.5 Vp-p (V)	⑤  3.8 Vp-p (V)	⑥ 28 VP-P (V)
⑦  7 V P-P (H)	⑧ 280 V P-P (H)	⑨  18 Vp-p (H)
⑩ 900 VP-P (H)	⑪  1.9 V P-P (H)	⑫  1.9 Vp-p (H)
⑬  0.9 VP-P (H)	⑭ 1.9 Vp-p (H)	⑮ 0.95 VP-P (H)
⑯ 1.95 VP-P (H)	⑰ 1.9 Vp-p (H)	⑱ 1.2 V P-P (H)

— D Board —

IC

IC101	B-3
IC102	c-3
IC103	C-1
IC104	C-6
IC105	C-B
IC352	B-1 2
IC354	B-1 2
IC355	B-10
IC431	C-7
IC501	E.7
IC601	E-2
IC602	F-2
IC605	E-2
IC606	F.2
IC607	F-5

TRANSISTOR

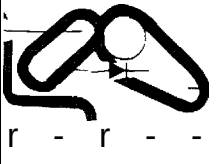
Q101	B-5
Q103	A-2
Q104	A-3
Q105	A-4
Q106	A-3
Q107	A-9
Q108	A-8
Q109	G5
Q122	C-7
Q344	A-9
Q345	B-10
Q346	B-10
Q434	B-9
Q435	B-10
Q436	B-9
4437	B.9
Q438	B-9
Q439	B-9
Q501	G7
Q502	G-10
Q503	F-6
Q504	D-5
4505	D5
4601	G-4
Q602	G-6
Q603	F-3
Q604	E-6
Q605	D-6
Q606	D-6
4610	D-4
Q613	F-6
Q614	F.6

DIODE

D101	D-10
D103	A-2
0104	G3
D106	D3
D107	D1
D108	C-1
D109	A-4
D110	A.5
D111	A-5
D112	c-5
D113	c-3
D114	C-3
D115	A.2
D116	B-2
D117	A-8
D118	B-5
D119	c-5
D120	A-4
D413	A-8
D432	B 4
D433	C-8
D434	C-8
D504	G-9
D505	F-9
D506	G-9
D507	E-11
D508	E-11
D509	E-11
D510	F-10
D511	F-10
D512	E-8
D515	E-9
D516	B-5
D517	c.5
D601	G-2
D602	G-2
D603	G-4
D604	G-5
D605	G-6
D606	G-6
D607	E-4
D608	E-4
D609	E-3
D610	E-3
D611	E-6
D612	E-4
D613	D-4
D614	E-5
D615	E-5
D616	E-5
D617	E-5
D618	E-5
D619	E-6
D620	F-2
D621	F-5
D622	G-4

VARIABLE RESISTOR

RV101	B-3



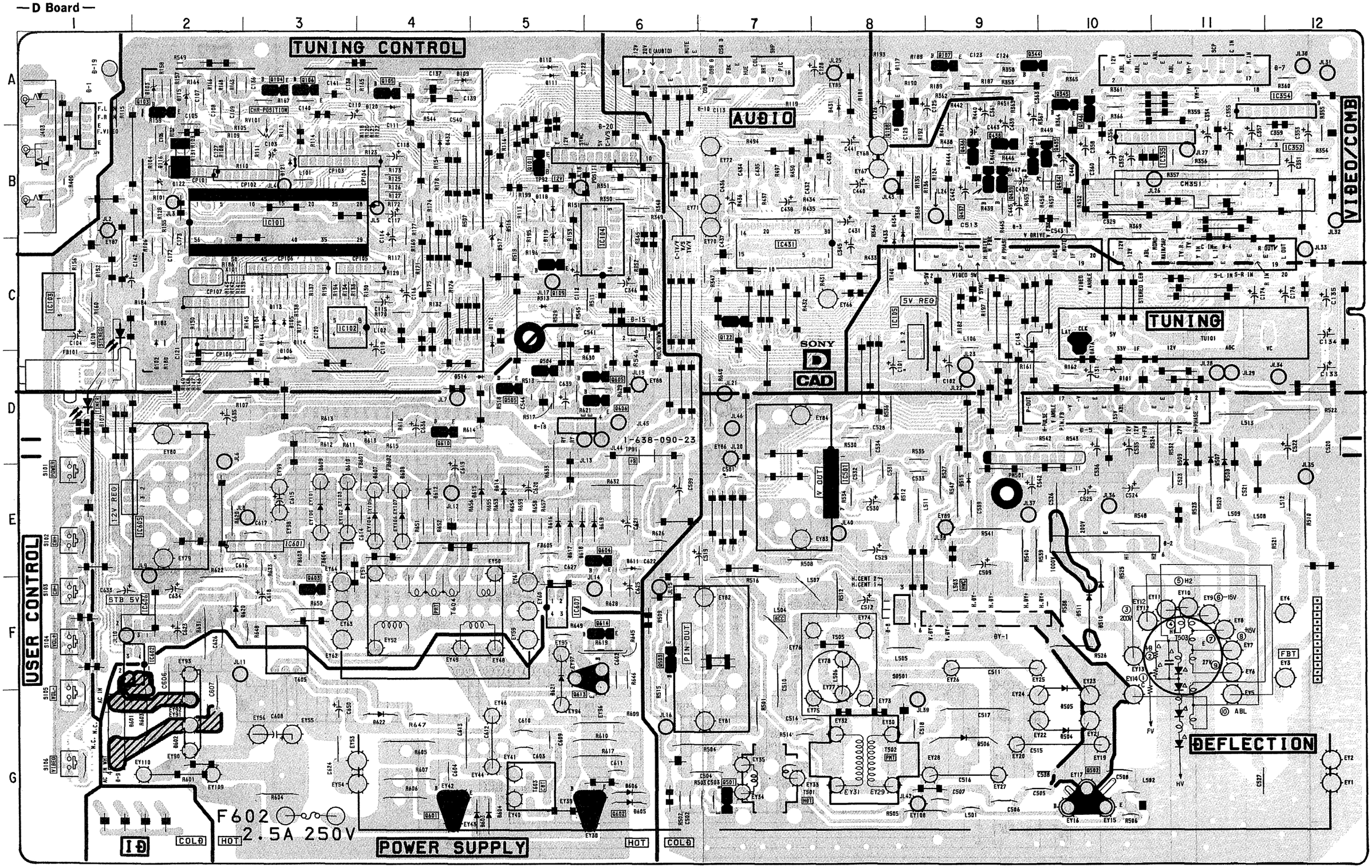
NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

KV-27TS35
RM-Y102

D [Y. C SW, AUDIO CONT, Y/C SEP, AUDIO SW, CONTROL, POWER, TUNER, V. OUT, H. OUT, PIN OUT]

— D Board —

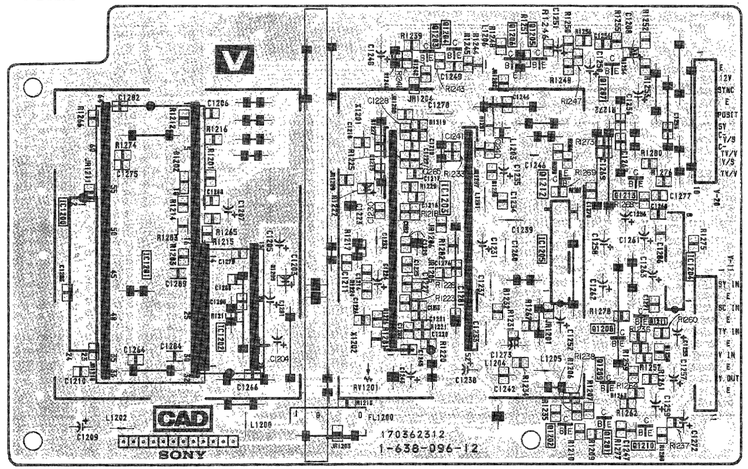


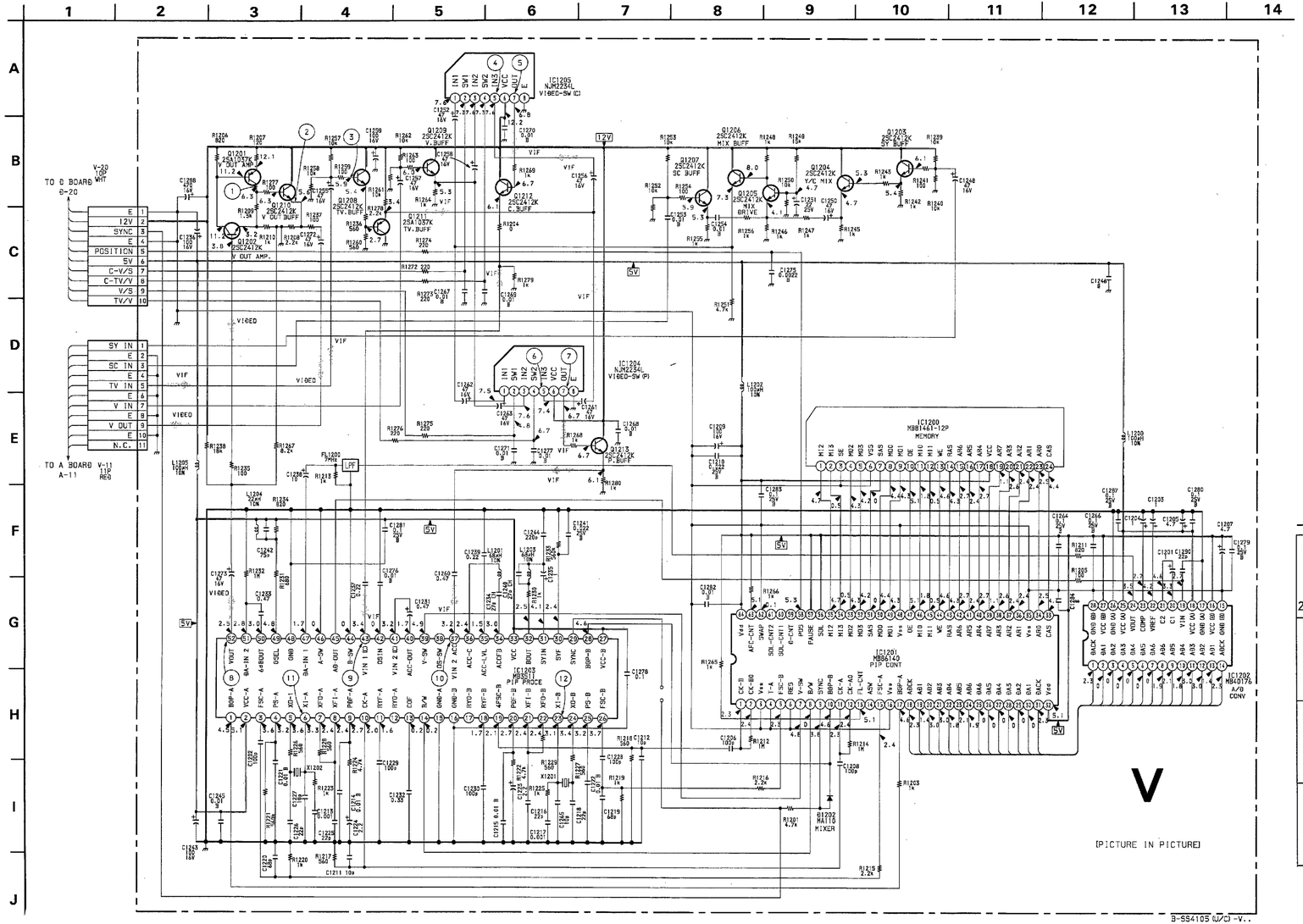
KV-27TS35
RM-Y102

KV-27TS35
RM-Y102

V [PICTURE IN PICTURE]

— V Board —

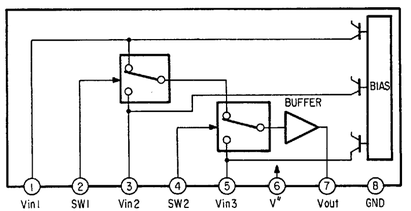




— V Board —

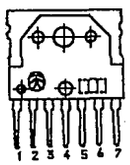
① 2.1 Vp-p (H)	② 2.1 Vp-p (H)	③ 2 Vp-p (H)
④ 1 Vp-p (H)	⑤ 1 Vp-p (H)	⑥ 1Vp-p (H)
⑦ 1 Vp-p (H)	⑧ Vp-p ( )	⑨ Vp-p ( )
⑩ Vp-p ( )	⑪ 0.2 Vp-p(0.075MS)	⑫ 0.59Vp-p(0.075MS)

V BOARD IC1205 NJM2234L

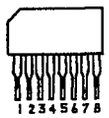


64. SEMICONDUCTORS

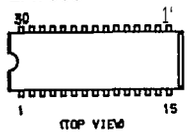
AN552 1



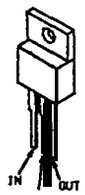
CX20 125
NJM2234L



LA7953

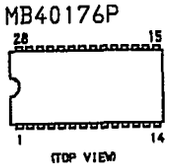


LM7805CT
LM7812CT
RC78M09FA



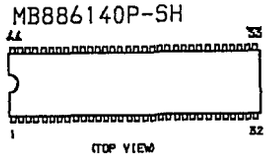
MB3511P-SH

MB40176P

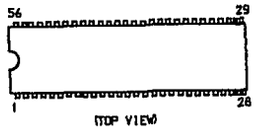


MB81461-12-PSZ-G-BE2

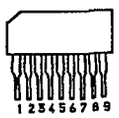
MB886140P-SH



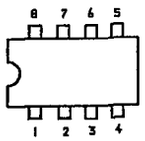
MC68HC05T7-LSC89919B



NJM2245S

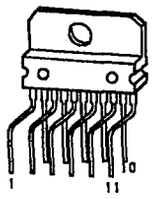


RC4558P
X24C01P

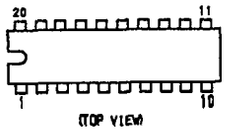


RC78L09A

TDA2009A



TDA3569B



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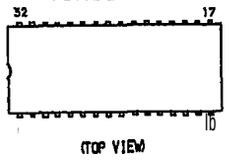

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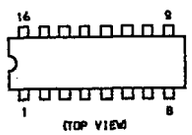
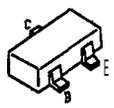


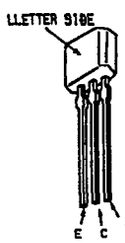
DTC144ES
2SC4115GR

2SA1091-O

2SA1162-G
2SB709A-R
2SC2412K-QR
2SD601 A-Q



2SA1175-HFE
2SC2785-HFE
2SC3311A-QRS



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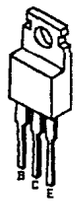
2SC2688-LK

2SC4274-02F9



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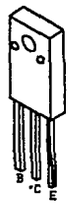
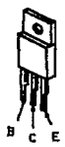


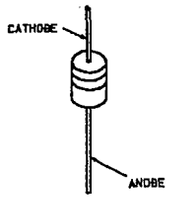
2SD 1585-K



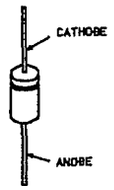
2SD1941-07

2SD2096EF

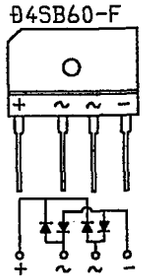
DINS4
RD 1 OSB
RD30ESB2
RD33ESB2
RD4.3ESB1
RD4.7ESB2
RD5.1ESB1
RD5.6ESB1
RD6.2ESB1
1SS119



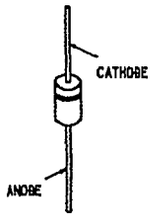
EGP20G
EL1Z
RGP02-17
10E-2



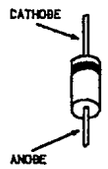
D4SB60-F



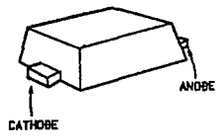
ERC38-06
ERC06-15s
RU-3AM
S2LA20F
EGP30GL-6072



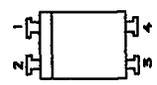
ERD29-08J



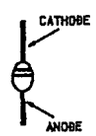
MA110



PC817-C
PS2501-1LB



U05G



SECTION 7
EXPLODED VIEWS

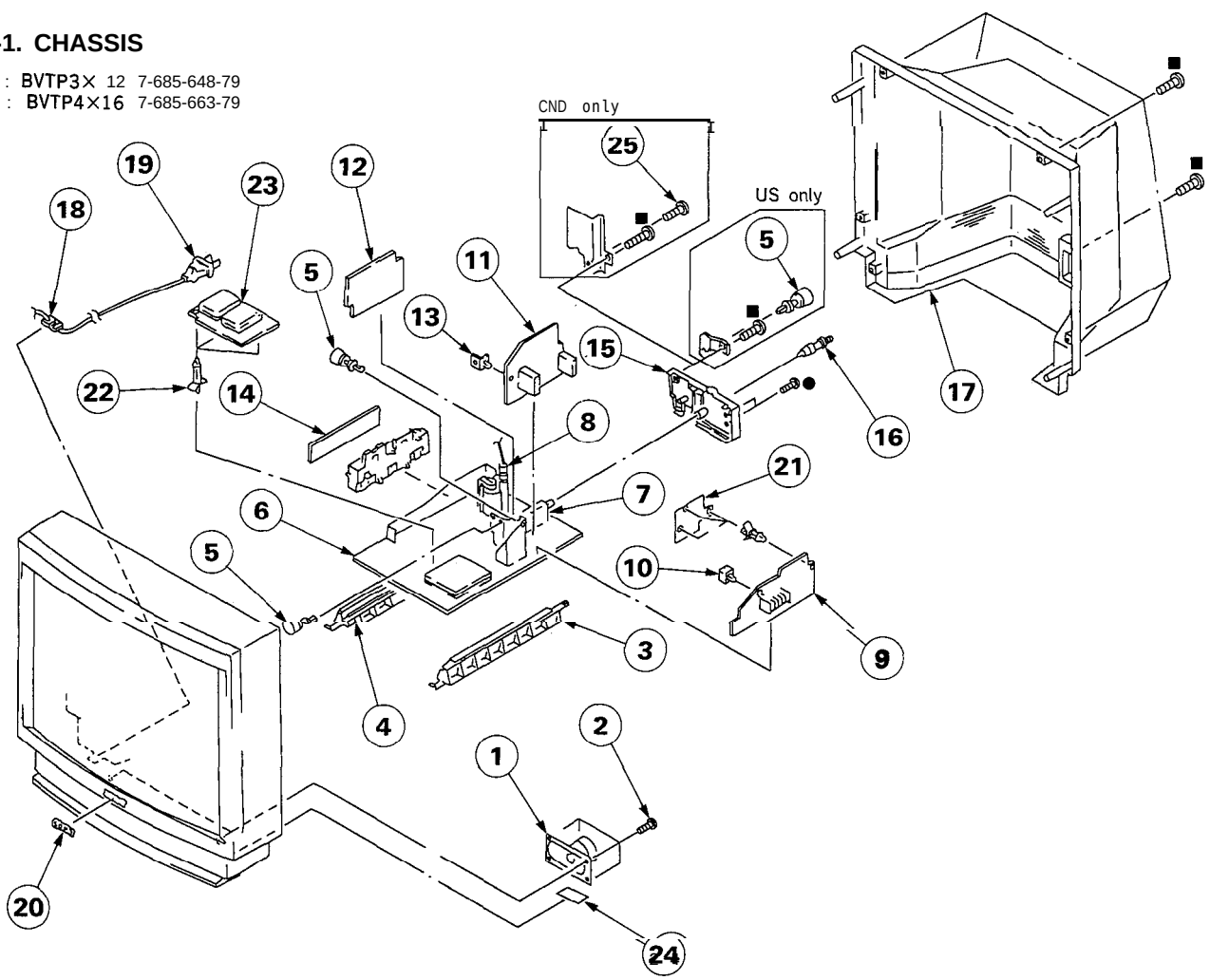
NOTE:
. Items with no part number and no description are not stocked because they are seldom required for routine service.
• The construction parts of an assembled part are indicated with a collation number in the remark column.
. Items marked " ‡ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

7-1. CHASSIS

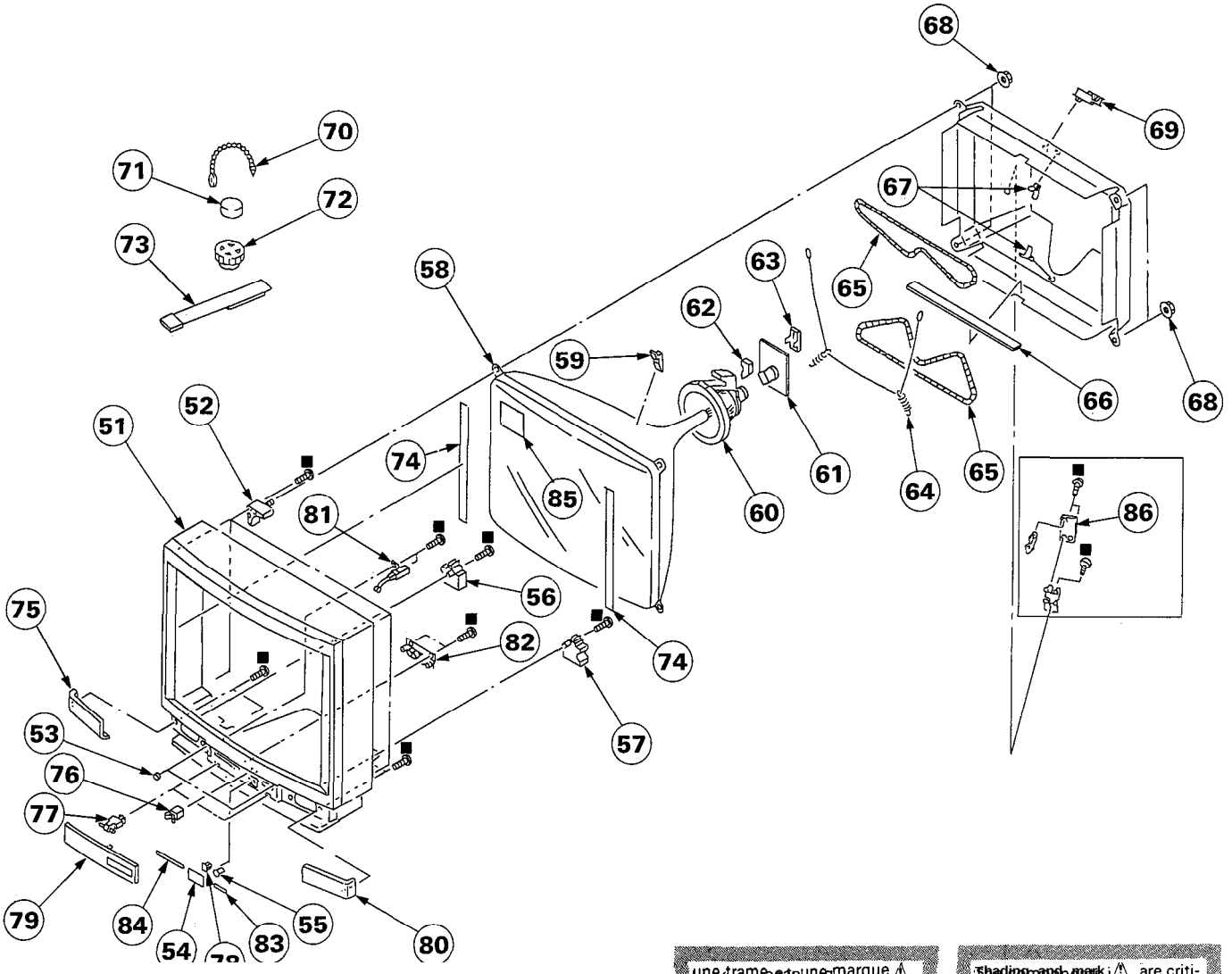
● : BVTP3× 12 7-685-648-79
■ : BVTP4×16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	1-544-549-11	SPEAKER	
2	4-388-477-01	SCREW(3X16),TAPPING,+BV YASHER	
3	*4-031-417-01	GUIDE (A), PC BOARD	
4	*4-031-418-01	GUIDE (B), PC BOARD	
5	*4-397-418-01	RIVET, T TYPE	
6	*A-1346-039-A	D BOARD, COMPLETE (USA ONLY)	
	*A-1346-038-A	D BOARD, COMPLETE (CND ONLY)	
7	⚠1-465-371-11	TUNER, ET (BTP-RA401) (USA ONLY)	
	A-1-465-371-21	TUNER, ET (BTP-RA401) (CND ONLY)	
8	⚠1-439-502-11	TRANSFORMER ASSY, FLYBACK (NX-2600A3)	
9	*A-1135-670-A	B BOARD, COMPLETE	
10	*4-032-236-01	HOLDER (B), PC BOARD	
11	*A-1296-931-A	A BOARD, COMPLETE	
12	*A-1345-953-A	E BOARD. COMPLETE	
13	*4-397-417-01	HOLDER, PC BOARD	
14	*1-638-095-11	F BOARD	
I 15	X-4029-754-1	TERMINAL BOARD ASSY, ANTENNA	
16	1-573-657-11	PLUG, F-PIN	
17	4-031-608-01	COYER, REAR	
18	⚠4-388-328-01	GROMMET, AC CORD	
19	⚠1-590-492-21	CORD, POWER (WITH CONNECTOR)	
20	4-394-048-01	EMBLEM (NO.9), SONY	
I 21	4-033-125-01	PLATE, SHIELD	
22	*3-703-353-10	SUPPORT, PC BOARD	
23	*A-1347-053-A	V BOARD, COMPLETE	
24	4-033-458-01	CUSHION (D)	
25	4-035-589-01	SCREW (M3X10), +P CONE POINT (CND ONLY)	

7-2. PICTURE TUBE

■ : BVTP4 X 16 7-685-663-79



une trame ou une marque ⚠ sont critiques pour la securite Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
51	4-031-607-01	CABINET (WITH BEZEL)	
52			
53	4-031-801-00	BRACKET, PICTURE TUBE	
54	4-032-391-11	PLATE, INDICATION	
55	*4-389-517-01	GUIDE (R), LIGHT	
56	*4-031-604-01	SUPPORT (LEFT), PICTURE TUBE	
57			
58	⚠ 8-737-753-05	PICTURE TUBE (A68JMT50X)	
59	3-704-495-01	SPACER, DY	
60	⚠ 1-4*A-1331-128	DEFLECTION BOARD COMPLETE (Y28PFA)	
61	*A-1331-128-A		
62			
63	*4-379-160-01	COVER (REAR), CRT	
66	⚠ 1-426-350-11	COIL, DEMAGNETIZATION	
*4-371-624-385-725-01		STOPPER, SHEET, BLOTTING WIRE	

REF.NO.	PART NO.	DESCRIPTION	REMARK
68	4-387-204-01	NUT, SPECIAL, PICTURE TUBE	
69	*4-387-284-01	HOLDER, LEAD	
70	4-308-870-00	CLIP, LEAD WIRE	
71	1-452-032-00	MAGNET, DISK: 10MM ϕ	
72	1-452-094-00	MAGNET, ROTATABLE DISK: 15MM ϕ	
73	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
74	4-033-457-01	CUSHION (C)	
75	X-4029-757-1	FRAME ASSY (LEFT), SPEAKER	
76	4-392-036-01	CATCHER', PUSH	
77	3-703-035-11	SHAFT, LID	
	*4-032-397-01	GUIDE, LIGHT	
79	X-4029-759-3	DOOR ASSY, CONTROL	
80	X-4029-758-1	FRAME ASSY (RIGHT), SPEAKER	
81	*4-032-393-01	DAMPER	
82	X-4029-805-1	BUTTON ASSY, MULTI	
83	4-032-390-11	LABEL (CONTROL) (A/V)	
84	4-032-392-11	LABEL (CONTROL) (BUTTON)	
85	*3-703-703-01	STICKER, SONY SYMBOL (50)	
86	*1-642-138-11	FA BOARD (CND ONLY)	

SECTION 8
ELECTRICAL PARTS LIST

B

NOTE:

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B. unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS . MF : μF, PF : μμF

COILS . MMH : mH, UH : μH

- The components identified by ❑ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation Should replacement be required, replace only with the value originally used
- There are some cases the reference number on one board overlaps on the other board Therefore, when ordering parts by the reference number, please include the board name

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1135-670-A	B BOARD, COYPLETE			
		**********			
	*4-341-752-01	EYELET (EY18~EY20)			
	4-382-854-11	SCREW (M3X10), P, SW (-)			
		<CONNECTOR>			
B1	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
B2	*1-564-506-11	PLUG, CONNECTOR 3P			
B3	*1-564-509-11	PLLG, CONNECTOR 6P			
B4	*1-564-506-11	PLUG, CONNECTOR 3P			
B7	1-573-300-11	CONNECTOR. BOARD TO BOARD 18P			
B10	1-573-300-11	CONNECTOR. BOARD TO BOARD 18P			
		<CAPACITOR>			
C301	1-124-282-00	ELECT	22MF	20%	16V
C302	1-163-009-11	CERAMIC CHIP	0.001MF	10%	5ov
C303	1-126-233-11	ELECT	22MF	20%	25V
C306	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C307	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C308	1-124-903-11	ELECT	1MF	20%	50V
C310	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C312	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C313	1-124-925-11	ELECT	2.2MF	20%	5ov
c314	1-126-233-11	ELECT	22MF	20%	25V
C315	1-124-907-11	ELECT	10MF	20%	50V
C316	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C317	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C318	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C319	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V
C320	1-126-101-11	ELECT	100MF	20%	16V
C321	1-124-907-11	ELECT	10MF	20%	50V
C322	1-124-903-11	ELECT	1MF	20%	50V
C323	1-124-477-11	ELECT	47MF	20%	16V
C324	1-124-907-11	ELECT	10MF	20%	5ov
C325	1-124-907-11	ELECT	10MF	20%	5ov
C326	1-124-927-11	ELECT	4.7MF	20%	50V
C329	1-124-927-11	ELECT	4.7MF	20%	5ov
C330	1-126-233-11	ELECT	2iMF	20%	2iV
C331	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C332	1-163-035-00	CERAMIC CHIP	0.047MF		50V
C333	1-126-233-11	ELECT	22MF	20%	25V
C1402	1-124-903-11	ELECT	1MF	20%	50V
C1403	1-124-907-11	ELECT	10MF	20%	50V
C1404	1-124-903-11	ELECT	1MF	20%	50V
C1405	1-124-925-11	ELECT	2.2MF	20%	50V
C1406	1-136-153-00	FILM	0.01MF	5%	50V
C1407	1-136-153-00	FILM	0.01MF	5%	50V
C1408	1-124-925-11	ELECT	2.2MF	20%	50V
C1409	1-124-925-11	ELECT	2.2MF	20%	5ov
C1310	1-124-120-11	ELECT	220MF	20%	25V
C1411	1-126-233-11	ELECT	22MF	20%	25V
C1412	1-124-120-11	ELECT	220MF	20%	25V
C1413	1-136-173-00	FILM	0.47MF	5%	50V
C1414	1-124-907-11	ELECT	10MF	20%	50V
C1415	1-136-169-00	FILM	0.22MF	5%	50V
C1416	1-124-563-11	ELECT	2200MF	20%	25V
C1417	1-136-169-00	FILM	0.22MF	5%	50V
C1418	1-124-563-11	ELECT	2200MF	20%	25V
C1419	1-124-563-11	ELECT	2200MF	20%	25V
C1422	1-163-025-11	CERAMIC CHIP	0.001MF		50V
		<DIODE>			
D301	8-719-158-39	DIODE RD10S-B			
D302	8-719-158-39	DIODE RD10S-B			
D303	8-719-158-39	DIODE RD10S-B			
D304	s-719-404-46	DIODE MA110			
D305	8-719-404-46	DIODE MA110			
D306	S-719-109-81	DIODE RD4.7ES-B2			
D307	8-719-158-39	DIODE RD10S-B			
D308	8-719-158-39	DIODE RD10S-B			
D309	8-719-158-39	DIODE RD10S-B			
D310	S-719-158-39	DIODE RD10S-B			
		<DELAY LINE>			
DL301	1-415-851-11	DELAY LINE			
		<FILTER>			
FL301	1-239-151-11	FILTER, HIGH PASS			
		<IC>			
I C301	8-759-518-39	I C TDA3569B/N2			
IC302	8-752-012-52	IC CX20125			
IC1400	8-759-980-43	IC TDA2009A			
		<COIL>			
1304	1-408-405-00	INDUCTOR	4.7UH		
		<TRANSISTOR>			
Q301	8-729-920-74	TRANSISTOR	2SC2412K-QR		
Q302	8-729-216-22	TRANSISTOR	2SA1162-G		
Q303	B-729-119-78	TRANSISTOR	2SC2785-HFE		
Q304	8-729-920-74	TRANSISTOR	2SC2412K-QR		
Q305	8-729-920-74	TRANSISTOR	2SC2412K-QR		

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q306	S-729-216-22	TRANSISTOR 2SA1162-G	
Q307	S-729-920-74	TRANSISTOR 2SC2412K-QR	
Q308	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q309	S-729-920-74	TRANSISTOR 2SC2412K-QR	
Q310	S-729-920-74	TRANSISTOR 2SC2412K-QR	
Q311	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q312	S-729-920-74	TRANSISTOR 2SC2412K-QR	
Q313	S-729-920-74	TRANSISTOR 2SC2412K-QR	
Q314	S-729-216-22	TRANSISTOR 2SA1162-G	
Q330	S-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1400	S-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1401	S-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1402	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q1403	S-729-216-22	TRANSISTOR 2SA1162-G	

<RESISTOR>

R301	l-216-091-00	METAL GLAZE 56K	5%	1/10W	
R302	l-216-075-00	METAL GLAZE 12K	5%	1/10W	
R303	l-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R304	l-216-073-00	METAL GLAZE 10K	5%	1/10W	
R305	l-216-041-00	METAL GLAZE 470	5%	1/10W	
R306	l-216-107-00	METAL GLAZE 270K	5%	1/10W	
R307	l-216-121-00	METAL GLAZE 1M	5%	1/10W	
R308	l-216-071-00	METAL GLAZE 8.2K	5%	1/10W	
R309	l-216-073-00	METAL GLAZE 10K	5%	1/10W	
R310	l-216-095-00	METAL GLAZE 82K	5%	1/10W	
R311	l-216-097-00	METAL GLAZE 100K	5%	1/10W	
R312	l-216-089-00	METAL GLAZE 47K	5%	1/10W	
R313	l-216-049-00	METAL GLAZE 1K	5%	1/10W	
R314	l-216-295-00	METAL GLAZE 0	5%	1/10W	
R315	l-216-295-00	METAL GLAZE 0	5%	1/10W	
R316	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R318	l-216-089-00	METAL GLAZE 47K	5%	1/10W	
R319	l-216-081-00	METAL GLAZE 22K	5%	1/10W	
R320	I-216-033-00	METAL GLAZE 220	5%	1/10W	
R321	l-216-073-00	METAL GLAZE 10K	5%	1/10W	
R322	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R323	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R324	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R325	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R326	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R327	l-216-065-00	METAL GLAZE 4.713	5%	1/10W	
R329	l-216-295-00	METAL GLAZE 0	5%	1/10W	
R330	l-216-037-00	METAL GLAZE 330	5%	1/10W	
R331	l-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R332	l-216-089-00	METAL GLAZE 47K	5%	1/10W	
R333	l-216-089-00	METAL GLAZE 47K	5%	1/10W	
R334	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R335	I-216-045-00	METAL GLAZE 680	5%	1/10W	
R336	l-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R337	l-216-049-00	METAL GLAZE 1K	5%	1/10W	
R338	l-216-049-00	METAL GLAZE 1K	5%	1/10W	
R339	I-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R340	l-216-097-00	METAL GLAZE 100K	5%	1/10W	
R342	l-216-069-00	METAL GLAZE 6.8K	5%	1/10W	
R343	l-216-049-00	METAL GLAZE 1K	5%	1/10W	
R344	l-216-025-00	METAL GLAZE 100	5%	1/10W	
R345	l-216-075-00	METAL GLAZE 12K	5%	1/10W	
R346	l-216-049-00	METAL GLAZE 1K	5%	1/10W	
R347	l-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
R348	l-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
R349	l-216-053-00	METAL GLAZE 1.5K	5%	1/10W	
R350	I-216-075-00	METAL GLAZE 12K	5%	1/10W	
R351	I-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
R352	l-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
R353	l-216-037-00	METAL GLAZE 330	5%	1/10W	
R354	l-216-075-00	METAL GLAZE 12K	5%	1/10W	
R355	l-216-075-00	METAL GLAZE 12K	5%	1/10W	
R356	l-216-025-00	METAL GLAZE 100	5%	1/10W	
R357	l-316-069-00	METAL GLAZE 6.8K	5%	1/10W	
R358	l-216-051-00	METAL GLAZE 1.2K	5%	1/10W	
R359	l-216-109-00	METAL GLAZE 330K	5%	1/10W	
R360	l-216-065-00	METAL GLAZE 4.7K	53	1/10W	
R361	l-216-057-00	METAL GLAZE 2.26	5%	1/10W	
R362	l-216-083-00	METAL GLAZE 27K	5%	1/10W	
R363	l-216-117-00	METAL GLAZE 680K	5%	1/10W	
R364	l-216-025-00	METAL GLAZE 100	5%	1/10W	
R377	l-247-688-11	CARBON 10	5%	1/4W	F
R380	l-216-041-00	METAL GLAZE 470	5%	1/10W	
R381	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R382	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R383	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R384	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R385	l-216-033-00	METAL GLAZE 220	5%	1/10W	
R386	l-216-121-00	METAL GLAZE 1M	5%	1/10W	
R387	l-216-059-00	METAL GLAZE 2.7K	5%	1/10W	
R388	l-216-051-00	METAL GLAZE 1.2K	5%	1/10W	
R1401	l-216-025-00	METAL GLAZE 100	5%	1/10W	
R1403	l-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
R1405	l-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
R1406	l-216-025-00	METAL GLAZE 100	5%	1/10W	
R1409	l-216-077-00	METAL GLAZE 15K	5%	1/10W	
R1410	l-216-063-00	METAL GLAZE 3.9K	5%	1/10W	
R1411	I-216-077-00	METAL GLAZE 15K	5%	1/10W	
R1412	l-216-071-00	METAL GLAZE 8.2K	5%	1/10W	
R1413	l-216-067-00	METAL GLAZE 5.6K	5%	1/10W	
R1414	l-216-067-00	METAL GLAZE 5.6K	5%	1/10W	
R1415	l-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R1416	l-216-089-00	METAL GLAZE 47K	5%	1/10W	
R1417	l-216-085-00	METAL GLAZE 33K	5%	1/10W	
R1418	l-216-097-00	METAL GLAZE 100K	5%	1/10W	
R1419	l-216-041-00	METAL GLAZE 470	5%	1/10W	
R1420	l-216-075-00	METAL GLAZE 12K	5%	1/10W	
R1421	l-216-075-00	METAL GLAZE 12K	5%	1/10W	
R1422	l-216-011-00	METAL GLAZE 27	5%	1/10W	
R1423	l-216-051-00	METAL GLAZE 1.2K	5%	1/10W	
R1424	l-216-051-00	METAL GLAZE 1.2K	5%	1/10W	
R1425	l-216-011-00	METAL GLAZE 27	5%	1/10W	
R1426	l-216-298-00	METAL GLAZE 2.2	5%	1/10W	
R1427	l-216-298-00	METAL GLAZE 2.2	5%	1/10W	
R1428	l-216-057-00	METAL GLAZE 2.2K	5%	1/10W	
R1429	l-216-057-00	METAL GLAZE 2.2K	5%	1/10W	

<VARIABLE RESISTOR>

RV301	l-238-011-11	RES, ADJ, CARBON 470
RV302	l-238-017-11	RES, ADJ, CARBON 22K
RV303	l-238-014-11	RES, ADJ, CARBON 3.3K
RV1400	l-238-016-11	RES, ADJ, CARBON 10K

<SWITCH>

S751	l-554-186-00	SWITCH, LEVER

<CRYSTAL>

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité Ne les remplacer que par des pièces de numéro spécifié

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

REF.NO.	PART NO.	DESCRIPTION	REMARK
X301	1-567-505-11	OSCILLATOR, CRYSTAL	

****

*1-642-138-11 FA BOARD (CND ONLY)
****

1-533-223-11 CLIP, FUSE
*4-341-751-01 EYELET (EY5,EY6)
*4-341-752-01 EYELET (EY1~EY4)

<CAPACITOR:

C600 ⚠	1-136-311-51	FILM	0.47MF	20%	125V

<FUSE>

F600 ⚠	1-532-748-11	FUSE, GLASS TUBE 6.3A/125V			

<CONNECTOR>

FA1	*1-580-844-11	PIN, CONNECTOR (POWER)
FA2	*1-580-844-11	PIN, CONNECTOR (POWER)

<RESISTOR>

R600 ⚠	1-202-723-91	SOLID	2.2M	10%	1/2W

****

*1-638-095-11 F BOARD
****

1-533-223-11 CLIP, FUSE (USA ONLY)
*4-341-751-01 EYELET (EY3~EY10.EY11(USA ONLY),EY12(USA ONLY),EY14.EY14.EY22~EY24)
*4-341-752-01 EYELET (EY1,EY2,EY13)

<CAPACITOR>

C680 ⚠	1-136-311-51	FILM	0.47MF	20%	125V (USA ONLY)
C681 ⚠	1-161-741-51	CERAMIC	0.001MF	10%	400V
C682 ⚠	1-136-311-51	FILM	0.47MF	20%	125V
C685	1-161-754-00	CERAMIC	0.001MF	10%	3KV

<DIODE>

D680	8-719-911-55	DIODE U05G
D1580	8-719-911-55	DIODE U05G
D1581	8-719-911-55	DIODE U05G

<CONNECTOR>

F1	*1-580-843-11	PIN, CONNECTOR (POWER)
F3	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
F4	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
F5	*1-559-991-21	CONNECTOR ASSY 1P
F7	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P
F8	*1-564-506-11	PLUG, CONNECTOR 3P
F9	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P
F18	1-564-507-11	PLUG, CONNECTOR 4P

<FUSE>

F601 ⚠	1-532-748-11	FUSE, GLASS TUBE 6.3A/125V (USA ONLY)			

REF.NO.	PART NO.	DESCRIPTION	REMARK

(RESISTOR:

R680 ⚠	1-202-723-91	SOLID	2.2M	10%	1/2W(USA ONLY)
R681 ⚠	1-202-723-91	SOLID	2.2M	10%	1/2W
R683	1-202-525-00	SOLID	10	10%	1/2W
R1580	1-216-449-11	METAL OXIDE	56	5%	2W F
R1581	1-216-450-00	METAL OXIDE	82	5%	2W F
R1584	1-215-882-00	METAL OXIDE	22	5%	2W F

<RELAY>

RY680 ⚠	1 515 684 22	RELAY

<TRANSFORMER>

T680 ⚠	1-424-220-21	TRANSFORMER, LINE FILTER
T681 ⚠	1-424-546-11	TRANSFORMER, LINE FILTER

<THERMISTOR>

THP601 ⚠	1-808-081-14	THERMISTOR, POSITIVE

****

*A-1296-931-A A BOARD, COMPLETE
****

<CONNECTOR>

A1	*1-564-508-11	PLUG, CONNECTOR 5P
A3	1-573-301-11	CONNECTOR, BOARD TO BOARD 20P
A4	1-573-301-11	CONNECTOR, BOARD TO BOARD 20P
A11	*1-564-514-11	PLUG, CONNECTOR 11P
A12	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P

<CAPACITOR>

C202	1-130-471-00	MYLAR	0.001MF	5%	50V
C203	1-126-233-11	ELECT	22MF	20%	50V
C204	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C207	1-136-163-00	FILM	0.068MF	5%	50V
C209	1-136-165-00	FILM	0.1MF	5% 10%	50V
C210	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	5ov
C211	1-164-161-11	CERAMIC CHIP	0.0022MF		5ov
C213	1-136-161-00	FILM	0.047MF	5%	5ov
C215	1-163-121-00	CERAMIC CHIP	150PF	5%	5ov
C216	1-126-233-11	ELECT	22MF	20%	25V
C217	1-126-233-11	ELECT	22MF	20%	25V
C218	1-124-903-11	ELECT	1MF	20%	50V
C219	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C220	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C222	1-126-233-11	ELECT	22MF	20%	25V
C224	1-163-01.7-00	CERAMIC CHIP	0.0047MF	10%	50V
C225	1-124-903-11	ELECT	1MF	20%	50V
C226	1-126-101-11	ELECT	100MF	20%	16V
C233	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C234	1-124-477-11	ELECT	47MF	20%	16V
C235	1-130-729-00	FILM	0.0027MF	5%	50V
C237	1-124-907-11	ELECT	10MF	20%	50V
C241	1-136-153-00	FILM	0.01MF	5%	5ov
C242	1-136-153-00	FILM	0.01MF	5%	5ov
C251	1-136-169-00	FILM	0.22MF	5%	5ov

REF.NO.	PART NO.	DESCRIPTION			REMARK
C254	l-124-907-11	ELECT	10MF	20%	50V
C274	l-124-477-11	ELECT	47MF	20%	25V
C275	l-164-005-11	CERAMIC CHIP	0.47MF		25V
C278	1-101-006-00	CERAMIC	0.047MF		50V
C287	1-101-006-00	CERAMIC	0.047MF		50V
C401	1-126-233-11	ELECT	22MF	20%	25V
C402	l-124-903-11	ELECT	1MF	20%	50V
C403	l-124-903-11	ELECT	1MF	20%	50V
C404	l-124-903-11	ELECT	1MF	20%	50V
C405	l-124-903-11	ELECT	1MF	20%	50V
C406	1-126-233-11	ELECT	22MF	20%	25V
C407	1-126-233-11	ELECT	22MF	20%	25V
C410	1-126-233-11	ELECT	22MF	20%	25V
C412	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C413	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C422	1-124-477-11	ELECT	47MF	20%	16V

<DIODE>

D401	s-719-158-39	DIODE	RD10S-B
D402	8-719-158-39	DIODE	RD10S-B
D403	8-719-158-39	DIODE	RD10S-B
D404	g-719-158-39	DIODE	RD10S-B
D405	8-719-158-39	DIODE	RD10S-B
D406	8-719-158-39	DIODE	RD10S-B
D407	8-719-158-39	DIODE	RD10S-B
D408	8-719-158-39	DIODE	RD10S-B
D409	8-719-158-39	DIODE	RD10S-B

<IC>

IC201	g-759-510-90	IC TDA8302
IC202	8-759-982-25	IC RC78L09A
IC203	8-759-982-37	IC RC78M93FD
MM201	8-741-637-11	IC SBX1637-11

<IF BLOCK>

IF201	1-464-756-21	IF BLOCK (IFF-450A)

<JACK>

5401	1-566-846-11	CONNECTOR, (S) TERMINAL 4P
5402	l-573-658-11	JACK BLOCK, PIN 7P

<COIL>

1201	l-410-792-31	INDUCTOR 0.82UH

<TRANSISTOR>

Q201	S-729-920-74	TRANSISTOR 2SC2412K-QR
Q203	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q209	8-729-216-22	TRANSISTOR 2SA1162-G
Q401	g-729-920-74	TRANSISTOR 2SC2412K-QR
Q406	s-729-920-74	TRANSISTOR 2SC2412K-QR

<RESISTOR>

JR201	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR202	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR207	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR215	I-216-295-00	METAL GLAZE	0	5%	1/10W
JR216	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR217	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR220	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR221	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR222	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR223	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR224	l-216-295-00	METAL GLAZE	0	5%	1/10W
JR230	l-216-295-00	METAL GLAZE	0	5%	1/10W
R200	I-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R201	l-216-085-00	METAL GLAZE	33K	5%	1/10W
R202	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R204	l-216-105-00	METAL GLAZE	220K	5%	1/10W
R206	l-216-091-00	METAL GLAZE	56K	5%	1/10W
R207	l-216-099-00	METAL GLAZE	120K	5%	1/10W
R208	l-216-091-00	METAL GLAZE	56K	5%	1/10W
R209	I-216-049-00	METAL GLAZE	1K	5%	1/10W
R210	I-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R211	I-216-089-00	METAL GLAZE	47K	5%	1/10W
R212	l-216-085-00	METAL GLAZE	33K	5%	1/10W
R213	I-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R214	l-216-095-00	METAL GLAZE	82K	5%	1/10W
R219	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R220	I-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R226	l-216-037-00	METAL GLAZE	330	5%	1/10W
R227	l-216-089-00	METAL GLAZE	47K	5%	1/10W
R228	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R229	l-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R230	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R231	l-216-295-00	METAL GLAZE	0	5%	1/10W
R232	l-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R234	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R237	I-216-033-00	METAL GLAZE	220	5%	1/10W
R238	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R239	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R249	l-216-025-00	METAL GLAZE	100	5%	1/10W
R250	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R251	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R252	l-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R253	l-216-025-00	METAL GLAZE	100	5%	1/10W
R255	l-216-295-00	METAL GLAZE	0	5%	1/10W
R256	l-216-083-00	METAL GLAZE	27K	5%	1/10W
R257	l-216-099-00	METAL GLAZE	120K	5%	1/10W
R258	l-216-025-00	METAL GLAZE	100	5%	1/10W
R260	l-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R261	l-216-073-00	METAL GLAZE	10K	5%	1/10W
R265	l-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R266	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R267	l-216-049-00	METAL GLAZE	1K	5%	1/10W
R270	l-216-295-00	METAL GLAZE	0	5%	1/10W
R271	l-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R272	l-216-295-00	METAL GLAZE	0	5%	1/10W
R273	1-249-482-11	CARBON	4.7	5%	1/2W F
R290	l-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R291	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R292	I-216-129-00	METAL GLAZE	2.2M	5%	1/10W
R293	l-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R294	l-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R295	l-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R296	l-216-295-00	METAL GLAZE	0	5%	1/10W
R401	l-216-023-00	METAL GLAZE	82	5%	1/10W
R402	l-216-079-00	METAL GLAZE	18K	5%	1/10W
R403	l-216-103-00	METAL GLAZE	180K	5%	1/10W
R404	l-216-079-00	METAL GLAZE	18K	5%	1/10W
R405	l-216-103-00	METAL GLAZE	180K	5%	1/10W
R406	l-216-079-00	METAL GLAZE	18K	5%	1/10W
R407	l-216-103-00	METAL GLAZE	180K	5%	1/10W

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité Ne les remplacer que par des pièces de numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R408	l-216-079-00	METAL GLAZE 18K 5% 1/10W	
R409	l-216-103-00	METAL GLAZE 180K 5% 1/10W	
R410	I-216-023-00	METAL GLAZE 82 5% 1/10W	
R411	l-216-023-00	METAL GLAZE 82 5% 1/10W	
R412	l-216-049-00	METAL GLAZE 1K 5% 1/10W	
R413	l-216-097-00	METAL GLAZE 100K 5% 1/10W	
R414	l-216-049-00	METAL GLAZE 1K 5% 1/10W	
R415	l-216-097-00	METAL GLAZE 100K 5% 1/10W	
R416	l-216-049-00	METAL GLAZE 1K 5% 1/10W	
R417	l-216-073-00	METAL GLAZE 10K 5% 1/10W	
R418	l-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R419	l-216-295-00	METAL GLAZE 0 5% 1/10W	
R420	l-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R421	l-216-049-00	METAL GLAZE 1K 5% 1/10W	
R422	l-216-049-00	METAL GLAZE 1K 5% 1/10W	
R431	l-216-025-00	METAL GLAZE 100 5% 1/10W	
R432	l-216-073-00	METAL GLAZE 10K 5% 1/10W	
8433	l-216-073-00	METAL GLAZE 10K 5% 1/10W	
R434	I-216-057-00	METAL GLAZE 2.2K 5% 1/10W	

<VARIABLE RESISTOR>

RV205 l-238-015-11 RES, ADJ, CARBON 4.7K
RV250 l-226-703-11 RES, ADJ, METAL GLAZE 10K

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*A-1331-128-A C BOARD, COMPLETE
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*4-379-160-01 COVER (REAR LID), CV
*4-379-167-01 COVER (MAIL), CV

<CONNECTOR>

C1 *1-506-371-00 PIN, CONNECTOR 2P
C2 *l-508-768-00 PIN, CONNECTOR (5MM PITCH) 6P
C3 *l-564-509-11 PLUG, CONNECTOR 6P

<CAPACITOR>

C702	l-162-116-00	CERAMIC	680PF	10%	2KV
C704	1-124-915-11	ELECT	10MF	20%	63V
C705	l-164-083-11	CERAMIC	680PF	10%	50V
C706	l-164-083-11	CERAMIC	680PF	10%	5ov
C707	l-164-083-11	CERAMIC	680PF	10%	50v
C708	l-164-081-11	CERAMIC	470PF	10%	50V
C709	l-164-081-11	CERAMIC	470PF	10%	50V
C710	l-164-081-11	CERAMIC	470PF	10%	50V
C712	l-124-477-11	ELECT	47MF	20%	16V
C721	l-161-731-81	CERAMIC	0.001MF	10%	2KV
C722	1-162-622-11	CERAMIC	330PF	10%	6.3KV

<DIODE>

D701 8-719-911-19 DIODE 1SS119
D702 8-719-911-19 DIODE 1SS119
D703 8-719-911-19 DIODE 1SS119

<JACK>

J701 ⚠ 1-540-071-13 SOCKET, PICTURE TUBE

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<COIL>	
L701	-408-417-00	INDUCTOR 47UH	
		<NEON LAMP>	
NL701	1-519-	OS-99 LAMP, NEON ASSY	
		<TRANSISTOR>	
Q701	8-729- 119-78	TRANSISTOR 2SC2785-HFE	
8702	8-729- 326-11	TRANSISTOR 2SC2611	
8703	8-729- 119-78	TRANSISTOR 2SC2785-HFE	
8704	8-729- 326-11	TRANSISTOR 2SC2611	
8705	8-729- 119-78	TRANSISTOR 2SC2785-HFE	
8706	s-729-326-11	TRANSISTOR 2SC2611	
		<RESISTOR>	
R701	l-202-838-00	SOLID 100K 10% 1/2W	
R702	l-216-394-00	METAL OXIDE 2.7 5% 3W	F
R703	l-202-842-11	SOLID 220K 10% 1/2W	
R704	l-202-846-00	SOLID 470K 10% 1/2W	
R705	l-202-837-00	SOLID 82K 10% 1/2W	
R706	l-202-549-00	SOLID 100 10% 1/2W	
R707	l-202-842-11	SOLID 220K 10% 1/2W	
R708	l-202-824-00	SOLID 3.3K 10% 1/2W	
R709	l-202-824-00	SOLID 3.3K 10% 1/2W	
R710	l-202-553-00	SOLID 150 10% 1/2W	
R711	1-249-411-11	CARBON 330 5% 1/4W	
R712	1-249-411-11	CARBON 330 5% 1/4W	
R713	l-202-824-00	SOLID 3.3K 10% 1/2W	
R714	l-249-405-11	CARBON 100 5% 1/4W	
R715	1-249-422-11	CARBON 2.7K 5% 1/4W	
R716		1/4W	
R718	1-249-416-11	CARBON 100 5% 1/4W	
R719	1-249-393-11	CARBON 1K 5% 1/4W	
R720	1-249-413-11	CARBON 470 5% 1/4W	
R722	l-215-923-00	METAL OXIDE 10K 5% 3W	F
R723	1-249-416-11	CARBON 820 5% 1/4W	
R725	1-249-422-11	CARBON 2.7K 5% 1/4W	
R726	1-249-393-11	CARBON 10 5% 1/4W	
R727	1-249-417-11	CARBON 1K 5% 1/4W	
R728	1-249-413-11	CARBON 470 5% 1/4W	
R729	1-249-411-11	CARBON 330 5% 1/4W	
R730	l-215-923-00	METAL OXIDE 10K 5% 3W	F
R732	1-249-412-11	CARBON 390 5% 1/4W	
R733	1-249-422-11	CARBON 2.7K 5% 1/4W	
R734	l-249-420-11	CARBON 1.8K 5% 1/4W	
R735	1-249-393-11	CARBON 10 5% 1/4W	
R737	l-215-923-00	METAL OXIDE 10K 5% 3W	F
R738	l-202-719-00	SOLID 1M 10% 1/2W	
R739	l-202-842-11	SOLID 220K 10% 1/2W	
R740	l-202-842-11	SOLID 220K 10% 1/2W	

<VARIABLE RESISTOR>

V701⚠ 1-230-619-11 RES, ADJ. METAL GLAZE 110M
V702 l-238-599-11 RES, ADJ, CARBON 4.7K
V703 l-238-598-11 RES, ADJ, CARBON 2.2K
V704 1-238-599-11 RES, ADJ, CARBON 4.7K

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV705	1-238-598-11	RES, ADJ, CARBON 2.2K	
RV706	1-238-599-11	RES, ADJ, CARBON 4.7X	
RV707	l-238-601-11	RES, ADJ, CARBON. 22K	
RV708	l-230-641-11	RES, ADJ, METAL GLAZE 2.2M	

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*A-1345-953-A E BOARD, COMPLETE
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<CAPACITOR>

C551	1-124-925-11	ELECT	2.2MF	20%	50V
C553	l-124-907-11	ELECT	10MF	20%	50V
C554	1-126-329-11	ELECT	470MF	10%	50V
C556	1-124-925-11	ELECT	2.2MF	20%	50V
C557	1-124-925-11	ELECT	2:2MF	20%	50V
C558	1-124-922-11	ELECT	1000MF	20%	50V
C575	1-124-478-11	ELECT	100MF	20%	25V
C578	l-124-480-11	ELECT	470MF	20%	25V
Cl520	l-106-351-00	MYLAR	0.0022MF	10%	100V
Cl522	1-124-925-11	ELECT	2.2MF	20%	50V
C1534	1-106-351-00	MYLAR	0.0022MF	10%	100V
C1536	1-106-383-00	MYLAR	0.047MF	10%	100V
C1538	1-124-907-11	ELECT	10MF	20%	50V
C1539	1-124-925-11	ELECT	2.2MF	20%	50V
C1540	1-106-343-00	MYLAR	0.001MF	10%	100V
Cl541	l-124-927-11	ELECT	4.7MF	20%	5ov
Cl542	1-124-927-11	ELECT	4.7MF	20%	50V
Cl543	1-124-925-11	ELECT	2.2MF	20%	50V
Cl544	1-124-927-11	ELECT	4.7MF	20%	50V
Cl545	l-124-767-00	ELECT	2.2MF	20%	50V
Cl548	l-124-925-11	ELECT	2.2MF	20%	50V

<DIODE>

D551	8-719-404-46	DIODE HA110
D552	8-719-110-72	DIODE RD30ES-B2
D555	8-719-911-55	DIODE U05G
D1520	8-719-109-88	DIODE RD5.6ES-B1
D1521	8-719-404-46	DIODE HA110
D1522	8-719-404-46	DIODE MA110
D1523	s-719-404-46	DIODE MA110
D1524	8-719-404-46	DIODE MA110

<CONNECTOR>

E5	l-573-301-11	CONNECTOR, BOARD TO BOARD 20P

<IC>

IC551	8-759-945-58	IC RC4558P
I C552	8-759-929-62	I C LM7812CT

<TRANSISTOR>

4558	8-729-920-74	TRANSISTOR 2SC2412K-QR
Q1520	g-729-920-74	TRANSISTOR 2SC2412K-QR

<RESISTOR>

R551	l-216-037-00	METAL GLAZE	330 5%	1/10W
R552	l-216-029-00	METAL GLAZE	150 5%	1/10W
R553	I-216-039-00	METAL GLAZE	390 5%	1/10W
R554	l-216-043-00	METAL GLAZE	560 5%	1/10W
R555	1-216-675-11	METAL CHIP	10K 0.50%	1/10W
R556	l-216-073-00	METAL GLAZE	10K 5%	1/10W
R557	l-215-869-11	METAL OXIDE	1K 5%	1W F
R558	l-216-047-00	METAL GLAZE	820 5%	1/10W
d559	l-216-083-00	METAL GLAZE	27K 5%	1/10W
R561	l-216-371-00	METAL OXIDE	.1.5 5%	2W F
R562	l-216-061-00	METAL GLAZE	3.3K 5%	1/10W
R563	l-216-067-00	METAL GLAZE	5.6K 5%	1/10W
R564	l-216-029-00	METAL GLAZE	150 5%	1/10W
R566	I-216-295-00	METAL GLAZE	0 5%	1/10W
R567	l-216-081-00	METAL GLAZE	22K 5%	1/10W
R568	l-247-700-11	CARBON	100 5%	1/4W F
R570	l-216-063-00	METAL GLAZE	3.9K 5%	1/10W
R571	1-216-085-00	METAL GLAZE	33K 5%	1/10W
R588	1-216-089-00	METAL GLAZE	47K 5%	1/10W
R1517	l-215-920-11	METAL OXIDE	3.3K 5%	3w F
R1520	l-216-091-00	METAL GLAZE	56K 5%	1/10W
R1521	l-216-063-00	METAL GLAZE	3.9K 5%	1/10W
R1522	l-216-097-00	METAL GLAZE	100K 5%	1/10W
R1523	l-216-073-00	METAL GLAZE	10K 5%	1/10W
R1524	l-216-073-00	METAL GLAZE	10K 5%	1/10W
R1525	l-216-073-00	METAL GLAZE	10K 5%	1/10W
R1526	l-216-073-00	METAL GLAZE	10K 5%	1/10W
R1527	l-216-295-00	METAL GLAZE	0 5%	1/10W
R1528	l-216-295-00	METAL GLAZE	0 5%	1/10W
R1529	l-216-103-00	METAL GLAZE	180K 5%	1/10W
R1530	l-216-081-00	METAL GLAZE	22K 5%	1/10W
R1531	l-216-049-00	METAL GLAZE	1K 5%	1/10W
R1532	l-216-049-00	METAL GLAZE	1K 5%	1/10W
R1533	l-216-033-00	METAL GLAZE	220 5%	1/10W
R1534	l-216-025-00	METAL GLAZE	100 5%	1/10W
R1535	I-216-097-00	METAL GLAZE	100K 5%	1/10W
R1536	I-216-097-00	METAL GLAZE	100K 5%	1/10W
R1537	l-216-081-00	METAL GLAZE	22K 5%	1/10W
R1538	l-216-113-00	METAL GLAZE	470K 5%	1/10W
R1539	l-216-113-00	METAL GLAZE	470K 5%	1/10W
R1540	l-216-105-00	METAL GLAZE	220K 5%	1/10W
R1541	l-216-073-00	METAL GLAZE	10K 5%	1/10W
R1544	I-216-097-00	METAL GLAZE	100K 5%	1/10W
R1545	l-216-073-00	METAL GLAZE	10K 5%	1/10W
R1546	l-216-295-00	METAL GLAZE	0 5%	1/10W
R1547	l-216-075-00	METAL GLAZE	12K 5%	1/10W
R1548	l-216-097-00	METAL GLAZE	100K 5%	1/10W
R1549	l-216-079-00	METAL GLAZE	18K 5%	1/10W
R1550	l-216-061-00	METAL GLAZE	3.3K 5%	1/10W
R1551	l-216-061-00	METAL GLAZE	3.3K 5%	1/10W
R1552	l-216-085-00	METAL GLAZE	33K 5%	1/10W
R1553	l-216-081-00	METAL GLAZE	22K 5%	1/10W
R1554	1-247-753-11	CARBON	1.2K 5%	1/2W
R1561	1-247-753-11	CARBON	1.2K 5%	1/2W
R1571	l-215-920-11	METAL OXIDE	3.3K 5%	3W F

<VARIABLE RESISTOR,

RV550	1-237-288-11	RES, ADJ,	CARBON	47K
RV551	1-238-543-11	RES, ADJ,	CARBON	470
RV552	l-238-550-11	RES, ADJ,	CARBON	100K
RV553	1-237-288-11	RES, ADJ,	CARBON	47K
RV554	l-230-494-11	RES, ADJ,	CARBON	1K
RV555	l-238-550-11	RES, ADJ,	CARBON	100K
RV556	l-238-550-11	RES, ADJ,	CARBON	100K
RV562	l-230-945-11	RES, ADJ,	CARBON	470K
RV563	l-238-076-11	RES, ADJ,	CARBON	5K

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REF.NO.	PART KO.	DESCRIPTION			REMARK
		<SWITCH>			
s551	l-554-186-00	SYITCH, LEVER			
		**********			
		*A-1346-039-A D BOARD, COMPLETE (USA ONLY)			
		**********			
		*A-1346-038-A D BOARD, COKPLETE (CND ONLY)			
		**********			
		*4-032-238-01 SHIELD, TRANSFORMER			
		*4-032-240-01 SUPPORT, B			
		*4-032-369-01 SHEET, RADIATION			
		*4-341-751-01 EYELET (EY19,EY20,EY25~EY35,EY38~EY44, EY46,EY48~EY52, EY77,EY78,EY85~108)			
		*4-341-752-01 EYELET (EY1,EY2,EY4~EY17,EY21~EY24,EY53, EY54,EY59,EY61,EY62,EY64,EY66~EY68,EY70~ EY72,EY79~EY84)			
		*4-381-724-01 HOLDER, IC			
		4-382-854-11 SCREY (M3X10), P, SW (+)			
		*4-393-401-01 SPRING			
		<CAPACITOR>			
C101	l-124-907-11	ELECT	10MF	20%	50V
C102	l-126-101-11	ELECT	100MF	20%	16V
C104	l-126-101-11	ELECT	100MF	20%	16V
C105	1-130-481-00	KYLAR	0.0068MF	5%	5ov
C106	l-130-483-00	MYLAR	0.01MF	5%	5ov
C107	1-124-499-11	ELECT	1MF	20%	50V
C108	1-124-499-11	ELECT	1MF	20%	50V
C109	1-124-499-11	ELECT	1MF	20%	50V
C110	l-124-903-11	ELECT	1MF	20%	50V
C111	l-164-039-11	CERAKIC	3PF	0.25PF	50V
C112	1-126-233-11	ELECT	22KF	20%	50V
C113	l-164-054-11	CERAMIC	22PF	5%	50V
C114	l-124-907-11	ELECT	10MF	20%	50V
C115	l-124-907-11	ELECT	10MF	20%	50V
C116	l-124-907-11	ELECT	10MF	20%	50V
C117	l-124-907-11	ELECT	10MF	20%	50V
C118	l-124-907-11	ELECT	10MF	20%	50V
C119	1-126-233-11	ELECT	22MF	20%	50V
C120	l-130-483-00	MYLAR	0.01MF	5%	50V
C121	1-101-006-00	CERAMIC	0.047MF		50V
C122	l-164-066-11	CERAMIC	68PF	5%	50V
C123	l-136-161-00	FILM	0.047MF	5%	50V
C124	l-102-978-00	CERAMIC	220PF	5%	50V
C125	l-124-903-11	ELECT	1MF	20%	50V
C126	l-124-907-11	ELECT	10MF	20%	50V
C127	l-164-082-11	CERAMIC	560PF	10%	50V
C128	1-124-477-11	ELECT	47MF	20%	16V
C129	l-130-479-00	MYLAR	0.0047MF	5%	50V
C131	l-124-443-00	ELECT	100MF	20%	10V
C133	1-126-935-11	ELECT	470MF	20%	16V
C134	l-124-360-00	ELECT	1000MF	20%	16V
C135	l-124-360-00	ELECT	1000MF	20%	16V
C136	l-164-066-11	CERAMIC	68PF	5%	50V
C137	l-164-066-11	CERAMIC	68PF	5%	50V
C138	l-164-066-11	CERAMIC	68PF	5%	50V
C139	l-164-066-11	CERAMIC	68PF	5%	50V
C140	l-164-066-1 1	CERAMIC	68PF	5%	50V
C141	l-164-066-11	CERAMIC	68PF	5%	50V
C142	l-124-903-11	ELECT	1MF	20%	50V
C143	l-124-360-00	ELECT	1000MF	20%	16V

REF NO	PART NO.	DESCRIPTION			REMARK
C172	1-101-006-00	CERAMIC	0.047MF		50V
C173	I-102-125-00	CERAMIC	0.0047MF	10%	50V
C174	1-126-935-11	ELECT	470MF	20%	16V
C176	1-126-935-11	ELECT	470MF	20%	16V
C329	1-124-631-11	ELECT	47MF	20%	16V
c345	l-124-907-11	ELECT	10MF	20%	50V
C346	l-124-903-11	ELECT	1MF	20%	50V
C351	l-124-907-11	ELECT	10MF	20%	50V
C352	l-124-907-11	ELECT	10MF	20%	50V
C353	1-124-477-11	ELECT	47MF	20%	16V
C354	1-124-477-11	ELECT	47MF	20%	16V
C355	1-126-233-11	ELECT	22MF	20%	25V
C356	1-126-233-11	ELECT	22MF	20%	25V
C357	l-124-478-11	ELECT	100MF	20%	25V
C358	l-124-478-11	ELECT	100MF	20%	25V
C359	1-101-004-00	CERAKI C	0.01MF		50V
C360	1-101-004-00	CERAMIC	0.01MF		50V
C361	l-124-902-00	ELECT	0.47MF	20%	50V
C363	1-124-477-11	ELECT	47MF	20%	16V
C430	1-126-233-11	ELECT	22MF	20%	25V
c431	l-124-907-11	ELECT	10MF	20%	50V
C432	l-136-167-00	FILM	0.15MF	5%	50V
C433	l-126-153-00	FILM	0.01MF	5%	50V
C434	1-136-153-00	FILM	0.01MF	5%	50V
C435	l-136-167-00	FILM	0.15MF	5%	50V
C436	l-124-907-11	ELECT	10MF	20%	50V
C437	l-136-161-00	FILM	0.047MF	5%	50V
C438	l-124-360-00	ELECT	1000MF	20%	16V
C439	l-124-119-00	ELECT	330MF	20%	16V
C440	l-124-907-11	ELECT	10MF	20%	50V
C441	l-124-907-11	ELECT	10MF	20%	50V
C442	l-124-907-11	ELECT	10MF	20%	50V
C445	l-124-903-11	ELECT	1MF	20%	50V
C446	l-124-903-11	ELECT	1MF	20%	50V
C501	l-136-173-00	FILM	0.47MF	5%	50V
C502	l-164-081-11	CERAMIC	470PF	10%	50V
C503	l-102-244-00	CERAKI C	220PF	10%	500V
C504	1-136-187-11	FILM	0.047MF	10%	250V
C505	l-162-116-00	CERAMIC	680PF	10%	2KV
C506	l-162-116-00	CERAMIC	680PF	10%	2KV
C507	l-106-371-00	MYLAR	0.015MF	5%	100"
C508	⚠.1-162-115-91	CERAMIC	330PF	10%	2KV
C509	l-123-024-21	ELECT	33MF		160V
C510	l-106-395-00	MYLAR	0.15MF	10%	200"
C511	l-136-113-00	FILM	2MF	5%	2oov
C512	1-124-634-11	ELECT	1MF	20%	250V
C513	l-164-081-11	CERAMIC	470PF	10%	50V
C514	l-102-228-00	CERAMIC	470PF	10%	500"
C515	⚠.1-137-347-11	FILM	0.022MF	3 %	2KV
C516	⚠. l-136-316-51	FILM	0.056MF	5%	630V
C517	l-136-124-00	FILM	0.56MF	5%	400V
C518	l-162-318-11	CERAMIC	0.001MF	10%	500V
C519	l-124-046-00	ELECT	10MF	20%	160V
C520	l-102-225-00	CERAMIC	470PF	10%	500V
C521	l-162-117-00	CERAMIC	100PF	10%	500V
C522	1-124-922-11	ELECT	1000MF	20%	50V
C523	l-162-117-00	CERAMIC	100PF	10%	5oov
C524	1-124-557-11	ELECT	1000MF	20%	25V
C525	l-123-947-00	ELECT	10MF	20%	250V
C526	l-162-114-00	CERAMIC	0.0047MF		2KV
C527	l-106-383-00	MYLAR	0.047MF		200"
C528	l-106-367-00	MYLAR	0.01MF	5%	100V
C529	l-124-607-11	ELECT	2200MF	20%	50V

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REF.NO.	PART NO.	DESCRIPTION			REMARK
C530	1-124-122-11	ELECT	100MF	20%	50V
C532	1-102-030-00	CERAMIC	330PF	10%	500V
C534	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C535	1-123-932-00	ELECT	4.7MF	20%	160V
C536	1-124-477-11	ELECT	47MF	20%	25V
C537	1-164-085-11	CERAMIC	0.001MF	10%	50V
C539	1-161-959-00	CERAMIC	22PF	10%	500V
C540	1-102-030-00	CERAMIC	330PF	10%	500V
C542	1-124-046-00	ELECT	10MF	20%	160V
c543	1-136-157-00	FILM	0.022MF	5%	50V
C599	1-123-024-21	ELECT	33MF		160V
C602	1-101-006-00	CERAMIC	0.047MF		50V
C603	1-136-165-00	FILM	0.1MF	5%	50V
C604	1-164-646-11	CERAMIC	2200PF	10%	500V
C606 ⚠	1-162-578-51	CERAMIC	0.0047MF	20%	400V
C607 ⚠	1-162-578-51	CERAMIC	0.0047MF	20%	400V
C608 ⚠	1-125-692711	ELECT (BLOCK)	820MF	20%	200V
C609	1-164-645-11	CERAMIC	1000PF	10%	500V
C610	1-136-165-00	FILM	0.1MF	5%	50V
C611	1-164-646-11	CERAMIC	2200PF	10%	500V
C612	1-130-959-00	FILM	0.047MF	10%	400V
C613	1-130-959-00	FILM	0.047MF	10%	400V
C614	1-164-645-11	CERAMIC	1000PF	10%	500V
C615	1-123-024-21	ELECT	33MF		160V
C616	1-164-644-11	CERAMIC	330PF	10%	500V
C617	1-136-165-00	FILM	0.1MF	5%	50V
C618	1-124-119-00	ELECT	330MF	20%	16V
C619	1-124-557-11	ELECT	1000MF	20%	25V
C620	1-124-360-00	ELECT	1000MF	20%	16V
C621	1-124-557-11	ELECT	1000MF	20%	25V
C622	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C623	1-124-119-00	ELECT	330MF	20%	16V
C624 ⚠	1-162-577-51	CERAMIC	0.0022MF	20%	400V
C625	1-126-101-11	ELECT	100MF	20%	16V
C626 ⚠	1-162-577-51	CERAMIC	0.. 0022MF	20%	400V
C627	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C633	1-126-101-11	ELECT	100MF	20%	16V
C634	1-124-478-11	ELECT	100MF	20%	25V
C635	1-126-101-11	ELECT	100MF	20%	16V
C636	1-124-907-11	ELECT	10MF	20%	50V
C639	1-126-233-11	ELECT	22MF	20%	25V
C650	1-124-119-00	ELECT	330MF	20%	16V

<BLOCK>

CM351	1-466-162-31	BLOCK, COM FILTER (CFB-4)

<NETWORK>

CP101	1-236-524-11	NETWORK, C
CP102	1-236-479-11	NETWORK, C
CP103	1-236-301-11	NETWORK, C
CP104	1-236-300-11	NETWORK, C
CP105	1-236-524-11	NETWORK, C
CP106	1-236-301-11	NETWORK, C
CP107	1-236-479-11	NETWORK, C
CP108	1-236-358-21	NETWORK, RES

<CONNECTOR>

D1	*1-564-508-11	PLUG, CONNECTOR 5P
D2	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P
D3	1-573-298-11	CONNECTOR, BOARD TO BOARD 20P
D4	1-573-298-11	CONNECTOR, BOARD TO BOARD 20P
D5	1-573-295-11	CONNECTOR, BOARD TO BOARD 20P
D7	1-573-297-1 1	CONNECTOR, BOARD TO BOARD 18P
D8	*1-564-506-11	PLUG, CONNECTOR 3P
D9	*1-508-766-00	PIN. CONNECTOR (5MM PITCH) 4P
D10	1-573-297-1 1	CONNECTOR, BOARD TO BOARD 18P
D15	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)
D18	1-564-507-11	PLUG, CONNECTOR 4P
D20	*1-564-513-11	PLUG, CONNECTOR 10P
DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P
JL21	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P

<DIODE>

D101	S-719-110-78	DIODE RD33ES-B2
D103	8-719-109-74	DIODE RD4.3ES-B1
D104	8-719-911-19	DIODE 1SS119
D106	8-719-911-19	DIODE 1SS119
D107	1-809-401-11	LED UNIT
D108	1-809-401-11	LED UNIT
D109	8-719-911-19	DIODE 1SS119
D110	8-719-911-19	DIODE 1SS119
Dlll	8-719-911-19	DIODE 1SS119
D112	8-719-911-19	DIODE 1SS119
D113	S-719-911-19	DIODE 1SS119
D114	8-719-911-19	DIODE 1SS119
D115	8-719-109-84	DIODE RD5.1ES-B1
D116	8-719-109-84	DIODE RD5.1ES-B1
D117	8-719-911-19	DIODE 1SS119
D118	8-719-911-19	DIODE 1SS119
D119	8-719-109-84	DIODE RD5.1ES-B1
D120	8-719-911-19	DIODE 1SS119
D431	8-719-911-19	DIODE 1SS119
D432	8-719-911-19	DIODE 1SS119
D433	8-719-911-19	DIODE 1SS119
D434	8-719-911-19	DIODE 1SS119
D504	X-719-945-80	DIODE ERC06-15S
D505	8-719-945-80	DIODE ERC06-15S
D506	8-719-900-26	DIODE ERD29-08J
D507	s-719-302-43	DIODE EL1Z
D508	s-719-971-20	DIODE ERC38-06
D509	8-719-979-85	DIODE EGP20G
D510	s-719-300-33	DIODE RU-3AM
D511	g-719-976-64	DIODE RGP02-17
D512	8-719-200-02	DIODE 10E2
D516	8-719-911-19	DIODE 1SS119
D517	s-719-109-92	DIODE RD6.2ES-B1
D531	1-130-777-00	FILM 0.1MF 10% 100V
D533	1-130-777-00	FILM 0.1MF 10% 100V
D601	8-719-911-19	DIODE 1SS119
D602 ⚠	8-719-510-63	DIODE D4SB60L-F
D603	8-719-510-48	DIODE D1N20R
D604	S-719-510-48	DIODE D1N20R
D605	8-719'510-48	DIODE D1N20R
D606	g-719-510-48	DIODE D1N20R
D607	S-719-510-64	DIODE S2LA20F
D608	8-719-510-64	DIODE S2LA20F
D609	S-719-510-64	DIODE S2LA20F
D610	8-719-510-64	DIODE S2LA20F
0611	8-719-911-19	DIODE 1SS119
D612	S-719-510-02	DIODE D1NS4
D613	8-719-911-19	DIODE 1SS119
D614	S-719-510-02	DIODE D1NS4
D615	S-719-510-02	DIODE D1NS4

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REF.NO.	PART NO.	DESCRIPTION	REMARK
D616	8-719-510-02	DIODE D1NS4	
D617	S-719-510-02	DIODE D1NS4	
D618	S-719-510-02	DIODE D1NS4	
D619	8-719-510-02	DIODE D1NS4	
D620	8-719-510-02	DIODE D1NS4	
D621	s-719-991-18	DIODE EGP30GL-6072	
D622	S-719-510-02	DIODE DINS4	
		<FUSE>	
F602 ⚠	1-576-105-21	F U S E 2.5A/250V	
	l-533-223-11	CLIP, FUSE: F602	
		<FERRITE BEAD:	
FB101	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB601	l-412-911-11	INDUCTOR, FERRITE BEAD	
FB602	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB603	l-412-911-11	INDUCTOR, FERRITE BEAD	
FB604	1-412-911-11	INDUCTOR, FERRITE BEAD	
FB605	l-410-396-41	FERRITE BEAD INDUCTOR	
		<IC>	
IC101	s-759-053-73	IC MC68HC05T7-LSC89921B	
IC102	S-759-500-31	IC X24C01P	
IC103	s-741-100-62	IC SBX1618-51	
IC104	8-759-987-89	IC TDA8444	
I C105	S-759-924-12	I C LM7805CT	
I C352	g-759-982-34	I C RC78M09FA	
IC354	s-759-710-68	IC NJM2245S	
IC355	S-759-710-68	IC NJM2245S	
IC431	s-759-820-63	IC LA7953	
IC501	S-759-402-35	IC AN5521	
IC601 ⚠	1-809-120-21	MODULE, POWER DM-43	
IC602	S-719-156-73	PHOTO COUPLER PS2501-1LB	
IC605	s-759-929-62	IC LM7812CT	
I C606	8-759-924-12	I C LM7805CT	
IC607	8-719-156-73	PHOTO COUPLER PS2501-1LB	
		<JACK>	
J403	1-573-659-11	JACK FLOCK, PIN 3P	
		<COIL>	
1101	1-412-911-11	INDUCTOR, FERRITE BEAD	
L102	1-412-911-11	INDUCTOR, FERRITE BEAD	
L106	l-410-669-31	INDUCTOR 33UH	
L502	l-422-613-11	COIL, AIR CORE	
1503	l-459-313-00	COIL WITH CORE (HWC)	
L504	l-459-104-00	COIL, DUST CORE	
L505	1-408-239-00	INDUCTOR 4.7MMH	
L506 ⚠	1-460-173-21	COIL, HORIZONTAL LINEARITY	
1507	l-459-075-00	COIL, DYNAMIC CONVERSION CHOKE	
1508	1-412-519-11	INDUCTOR 3.3UH	
1509	l-412-529-11	INDUCTOR 22UH	
1511	l-408-698-00	INDUCTOR 8.2UH	
L512	l-412-045-11	INDUCTOR 2.2MMH	
L513	l-408-300-00	INDUCTOR 6.8UH	
		<MODULE>	
PM501 ⚠	1-809-492-11	MODULE, PROTECTOR PM-23	

REF.NO	PART NO.	DESCRIPTION	REMARK
		<TRANSISTOR>	
Q101	8-729-l 19-78	TRANSI STOR 2SC2785-HFE	
Q103	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q104	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q105	S-729-119-78	TRANSISTOR 2SC2785-HFE	
Q106	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q107	S-729-119-76	TRANSISTOR 2SA1175-HFE	
Q108	S-729-119-78	TRANSISTOR 2SC2785-HFE	
Q109	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q122	S-729-900-89	TRANSISTOR DTC144ES	
Q344	8-729-119-7s	TRANSISTOR 2SC2785-HFE	
Q345	8-729-119-78	TRANSISTOR 2SC2785-HFE	
8346	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q434	S-729-119-78	TRANSISTOR 2SC2785-HFE	
Q435	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q436	S-729-119-76	TRANSISTOR 2SA1175-HFE	
Q437	S-729-119-76	TRANSISTOR 2SA1175-HFE	
Q438	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q439	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q501	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q502	s-729-304-50	TRANSISTOR 2SD1941-06	
Q503	S-729-141-59	TRANSISTOR 2SD1585-LK	
Q504	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q505	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q601	S-729-927-22	TRANSISTOR 2SC4664MNP-F	
Q602	8-729-927-22	TRANSISTOR 2SC4664MNP-F	
Q603	s-729-920-92	TRANSISTOR 2SD2096-EF	
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q605	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q610	E-729-200-17	TRANSISTOR 2SA1091-O	
Q613	8-729-931-43	TRANSISTOR 2SC4274-02F9	
Q614	8-729-927-12	TRANSISTOR 2SC4115SQR	
		<RESISTOR>	

R101	l-249-405-11	CARBON	100	5%	1/4W
R102	l-249-409-11	CARBON	220	5%	1/4W
R103	l-249-409-11	CARBON	220	5%	1/4W
R104	l-249-409-11	CARBON	220	5%	1/4W
R105	1-249-429-11	CARBON	10K	5%	1/4W
R106	1-249-437-11	CARBON	47K	5%	1/4W
R107	l-249-409-11	CARBON	220	5%	1/4W
R108	1-249-413-11	CARBON	470	5%	1/4W
R109	1-249-413-11	CARBON	470	5%	1/4W
R110	1-249-413-11	CARBON	470	5%	1/4W
R111	l-249-409-11	CARBON	220	5%	1/4W
R112	l-249-409-11	CARBON	220	5%	1/4W
R113	1-249-417-11	CARBON	1K	5%	1/4W
R114	l-249-409-11	CARBON	220	5%	1/4W
R116	l-215-405-00	METAL	220	1%	1/4W
R117	1-249-404-l 1	CARBON	220	5%	1/4W
R118	l-249-409-11	CARBON	220	5%	1/4W
R119	1-249-429-11	CARBON	10K	5%	1/4W
R120	l-249-409-11	CARBON	220	5%	1/4W
R121	1-249-425-11	CARBON	4.7K	5%	1/4W
R122	l-249-409-11	CARBON	220	5%	1/4W
R123	l-249-409-11	CARBON	220	5%	1/4W
R124	l-249-409-11	CARBON	220	5%	1/4W
R125	l-249-430-11	CARBON	12K	5%	1/4W
R126	l-215-433-00	METAL	3.3K	1%	1/4W

D

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité Ne les remplacer que par des pièces de numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R127	1-215-425-00	METAL	1.5K	1%	1/4W	
R128	1-249-431-11	CARBON	15K	5%	1/4W	
R129	1-249-417-11	CARBON	1K	5%	1/4W	
R130	1-249-421-11	CARBON	2.2K	5%	1/4W	
R131	1-249-429-11	CARBON	10K	5%	1/4W	
R132	1-249-429-11	CARBON	10K	5%	1/4W	
R133	1-249-409-11	CARBON	220	5%	1/4W	
R134	1-249-409-11	CARBON	220	5%	1/4W	
R135	1-249-409-11	CARBON	220	5%	1/4W	
R136	1-249-409-11	CARBON	220	5%	1/4W	
R137	1-249-409-11	CARBON	220	5%	1/4W	
R138	1-249-409-11	CARBON	220	5%	1/4W	
R139	1-249-409-11	CARBON	220	5%	1/4W	
R140	1-249-409-11	CARBON	220	5%	1/4W	
R141	1-249-409-11	CARBON	220	5%	1/4W	
R142	1-249-409-11	CARBON	220	5%	1/4W	
R143	1-249-409-11	CARBON	220	5%	1/4W	
R144	1-249-409-11	CARBON	220	5%	1/4W	
R145	1-249-421-11	CARBON	2.2K	5%	1/4W	
R146	1-249-421-11	CARBON	2.2K	5%	1/4W	
R147	1-249-421-11	CARBON	2.2K	5%	1/4W	
R148	1-249-409-11	CARBON	220	5%	1/4W	
R149	1-249-409-11	CARBON	220	5%	1/4W	
R150	1-249-409-11	CARBON	220	5%	1/4W	
R151	1-249-429-11	CARBON	10K	5%	1/4W	
R152	1-249-409-11	CARBON	220	5%	1/4W	
R153	1-249-429-11	CARBON	10K	5%	1/4W	
R154	1-249-437-11	CARBON	47K	5%	1/4W	
R155	1-249-417-11	CARBON	1K	5%	1/4W	
R156	1-249-409-11	CARBON	220	5%	1/4W	
R157	1-249-417-11	CARBOS	1K	5%	1/4W	
R158	1-249-429-11	CARBON	10K	5%	1/4W	
R159	1-249-429-11	CARBON	10K	5%	1/4W	
R160	1-249-405-11	CARBON	100	5%	1/4W	
R161	1-215-923-00	METAL OXIDE	10K	5%	3W	F
R162	1-249-417-11	CARBON	1K	5%	1/4W	
R163	1-247-883-00	CARBON	150K	5%	1/4W	
R164	1-249-437-11	CARBON	47K	5%	1/4W	
R165	1-247-883-00	CARBON	150K	5%	1/4W	
R166	1-249-437-11	CARBON	47K	5%	1/4W	
R167	1-247-883-00	CARBON	150K	5%	1/4W	
R168	1-249-437-11	CARBON	47K	5%	1/4W	
R169	1-249-427-11	CARBON	6.8K	5%	1/4W	
R170	1-249-429-11	CARBON	10K	5%	1/4W	
R171	1-249-435-11	CARBON	33K	5%	1/4W	
R172	1-215-445-00	METAL	10K	1%	1/4W	
R173	1-215-437-00	METAL	4.7K	1%	1/4W	
R174	1-249-428-11	CARBON	8.2K	5%	1/4W	
R175	1-249-425-11	CARBON	4.7K	5%	1/4W	
R176	1-249-440-11	CARBON	82K	5%	1/4W	
R177	1-215-439-00	METAL	5.6K	1%	1/4W	
R178	1-215-437-00	METAL	4.7K	1%	1/4W	
R179	1-249-427-11	CARBON	6.8K	5%	1/4W	
R181	1-249-425-11	CARBON	4.7K	5%	1/4W	
R182	1-249-409-11	CARBON	220	5%	1/4W	
R184	1-249-429-11	CARBON	10K	5%	1/4W	
R186	1-247-903-00	CARBON	1M	5%	1/4W	
R187	1-249-441-11	CARBON	100K	5%	1/4W	
R188	1-247-903-00	CARBON	1M	5%	1/4W	
R189	1-249-429-11	CARBON	10K	5%	1/4W	
R190	1-249-429-11	CARBON	10K	5%	1/4W	
R191	1-249-429-11	CARBON	10K	5%	1/4W	
R192	1-249-427-11	CARBON	6.8K	5%	1/4W	
R193	1-249-425-11	CARBON	4.7K	5%	1/4W	
R194	1-249-429-11	CARBON	10K	5%	1/4W	
R195	1-249-429-11	CARBON	10K	5%	1/4W	
R196	1-249-429-11	CARBON	10K	5%	1/4W	
R197	1-249-423-11	CARBOE	3.3K	5%	1/4W	
R199	1-249-429-11	CARBON	10K	5%	1/4W	
R345	1-249-425-11	CARBON	4.7K	5%	1/4W	
R346	1-249-436-11	CARBON	39K	5%	1/4W	
R347	1-249-435-11	CARBON	33K	5%	1/4W	
R348	1-249-429-11	CARBON	10K	5%	1/4W	
R349	1-249-429-11	CARBON	10K	5%	1/4W	
R350	1-249-429-11	CARBON	10K	5%	1/4W	
R351	1-249-429-11	CARBON	10K	5%	1/4W	
R352	1-249-425-11	CARBON	4.7K	5%	1/4W	
R353	1-249-417-11	CARBON	1K	5%	1/4W	
R354	1-249-414-11	CARBON	560	5%	1/4W	
R355	1-249-414-11	CARBON	560	5%	1/4W	
R356	1-249-414-11	CARBON	560	5%	1/4W	
R357	1-249-414-11	CARBON	560	5%	1/4W	
R358	1-249-414-11	CARBON	560	5%	1/4W	
R359	1-249-414-11	CARBON	560	5%	1/4W	
R360	1-249-415-11	CARBON	680	5%	1/4W	
R361	1-249-417-11	CARBON	1K	5%	1/4W	
R363	1-249-405-11	CARBON	100	5%	1/4W	
R364	1-249-429-11	CARBON	10K	5%	1/4W	
R365	1-249-437-11	CARBON	47K	5%	1/4W	
R367	1-249-415-11	CARBON	680	5%	1/4W	
R369	1-249-405-11	CARBON	100	5%	1/4W	
R431	1-249-425-11	CARBON	4.7K	5%	1/4W	
R432	1-249-425-11	CARBON	4.7K	5%	1/4W	
R433	1-249-425-11	CARBON	4.7K	5%	1/4W	
R434	1-249-426-11	CARBON	5.6K	5%	1/4W	
R435	1-249-426-11	CARBON	5.6K	5%	1/4W	
R436	1-249-426-11	CARBON	5.6K	5%	1/4W	
R437	1-249-426-11	CARBON	5.6K	5%	1/4W	
R438	1-249-423-11	CARBON	3.3K	5%	1/4W	
R439	1-249-425-11	CARBON	4.7K	5%	1/4W	
R440	1-249-428-11	CARBON	8.2K	5%	1/4W	
R441	1-249-428-11	CARBON	8.2K	5%	1/4W	
R442	1-249-421-11	CARBON	2.2K	5%	1/4W	
R443	1-249-417-11	CARBON	1K	5%	1/4W	
R444	1-249-423-11	CARBON	3.3K	5%	1/4W	
R445	1-249-429-11	CARBON	10K	5%	1/4W	
R446	1-249-429-11	CARBON	10K	5%	1/4W	
R447	1-249-405-11	CARBON	100	5%	1/4W	
R448	1-249-417-11	CARBON	1K	5%	1/4W	
R449	1-249-405-11	CARBON	100	5%	1/4W	
R450	1-249-391-11	CARBON	6.8	5%	1/4W	
R451	1-249-402-11	CARBON	56	5%	1/4W	
R452	1-249-409-11	CARBON	220	5%	1/4W	
R455	1-249-417-11	CARBON	1K	5%	1/4W	
R456	1-249-405-11	CARBON	100	5%	1/4W	
R457	1-249-405-11	CARBON	100	5%	1/4W	
R494	1-249-405-11	CARBON	100	5%	1/4W	
R497	1-249-405-11	CARBON	100	5%	1/4W	
R501	1-249-405-11	CARBON	100	5%	1/4W	
R502	1-249-423-11	CARBON	3.3K	5%	1/4W	
R503	1-249-426-11	CARBON	5.6K	5%	1/4W	F
R504	1-215-918-51	METAL OXIDE	1.5K	5%	3W	F
R505	1-216-342-11	METAL OXIDE	0.27	5%	1W	F
R506	1-249-401-11	CARBON	47	5%	1/4W	
R507	1-249-427-11	CARBON	6.8K	5%	1/4W	
R508	1-249-455-11	CARBON	4.7	5%	1/4W	F
R509	1-249-423-11	CARBON	3.3K	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié

- The components identified by ❑ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation Should replacement be required, replace only with the value originally used

REF.NO.	PART NO.	DESCRIPTION				REMARK
R510	l-215-896-00	METAL OXIDE	4.7K	5%	2W	F
R512	1-215-861-00	METAL OXIDE	47	5%	1W	F
R513	1-249-417-11	CARBON	1K	5%	1/4W	
R514 ⚠	1-249-415-91	CARBON	680	5%	1/4W	F
R515	1-249-421-11	CARBON	2.2K	5%	1/4W	
R517	l-249-417-11	CARBON	1K	5%	1/4W	
R518	l-249-417-11	CARBON	1K	5%	1/4W	
R519	l-249-405-11	CARBON	100	5%	1/4W	
R520	I-249-389-11	CARBON	4.7	5%	1/4W	F
R521	l-249-448-11	CARBON	1.2	5x	1/4W	F
R522	l-216-375-00	METAL OXIDE	3.3	5%	2W	F
R523 ⚠	1-216-345-91	METAL OXIDE	0.47	5%	1W	F
Ri24	I-216-373-11	METAL OXIDE	2.2	5%	2W	F
R525 A.	l-249-446-91	CARBON	1.2	5%	1/4W	F
R526 ⚠	1-216-434-91	METAL OXIDE	l.SK	5%'	1W	F
R527	l-216-429-00	METAL OXIDE	270	5%	1W	F
R529	l-249-429-11	CARBON	10K	5%	1/4W	
R530	1-249-436-11	CARBON	39K	5%	1/4W	
R534	1-249-435-11	CARBON	33K	5%	1/4W	
R535	I-215-373-31	METAL	10	1%	1/4W	
R536	1-249-425-11	CARBON	4.7K	5%	1/4W	
R538	l-202-838-00	SOLID	100K	10%	1/2W	
R539	I-202-836-00	SOLID	100K	10%	1/2W	
R540	1-202-838-00	SOLID	100K	10%	1/2W	
R541	l-202-838-00	SOLID	100K	10%	1/2W	
⊠R542 ⚠		METAL			1/4W	
⊠R543 ⚠		METAL			1/4W	
R544	'l-249-429-11	CARBON	10K	5%	1/4W	
R545	I-249-417-11	CARBON	1K	5%	1/4W	
R546	l-249-417-11	CARBON	1K	5%	1/4W	F
R547	I-202-833-11	SOLID	18K	10%	1/2W	
R548	I-216-369-00	METAL OXIDE	1	5%	2W	F (USA ONLY,)
R603	1-215-900-11	METAL OXIDE	22K	51	2W	F
R604 ⚠	1-216-444-91	MET-AL OXIDE	82K	5%	1W	F
R605	l-216-369-00	METAL OXIDE	1	5%	2W	F
R606	1-215-878-00	METAL OXIDE	33K	5%	1W	F
R607	l-216-377-11	METAL OXIDE	4.7	5%	2W	F
R609	I-216-369-00	METAL OXIDE	1	5%	2W	F
R610	I-215-878-00	METAL OXIDE	33K	5%	1W	F
R611	l-207-645-00	WIREWOUND	0.47	i%	3W	F
R612	l-215-417-00	METAL	680	1%	1/4W	
R613	l-215-477-00	METAL	220K	1%	1/4W	
R614	1-249-441-11	CARBON	100K	5%	1/4W	
R615	l-249-429-11	CARBON	10K	5%	1/4W	
R616	I-247-895-00	CARBON	470K	5%	1/4W	
R617	1-216-377-11	METAL OXIDE	4.7	5%	2W	F
R619	I-249-421-11	CARBON	2.2K	5%	1/4W	
R620	I-247-708-11	CARBON	470	5%	1/4W	F
R621	l-249-429-11	CARBON	10K	5%	1/4W	
R622	l-247-747-11	CARBON	470	5%	1/2W	F
R623	l-249-405-11	CARBON	100	5%	1/4W	F
R626	l-249-389-11	CARBON	4.7	5%	1/4W	F
R628	l-249-423-1 1	CARBON	3.3K	5%	1/4W	
R629	l-249-416-11	CARBON	820	5%	1/4W	
R630	1-249-416-11	CARBON	820	5%	1/4W	
R631 ⚠	1-202-730-91	SOLID	8.2M	10%	1/2W	
R632	l-215-892-11	METAL OXIDE	1K	5%	2W	F
R633	I-216-426-11	METAL OXIDE	82	5%	1W	F
R640	I-216-379-11	METAL OXIDE	6.S	5%	2W	F
R645	l-216-379-11	METAL OXIDE	6.8	5%	2W	F
R646	1-249-393-11	CARBON	10	5%	1/4W	
R647	l-2497385-11	CARBON	2.2	5%	1/4W	F
R648	1-249-393-11	CARBON	10	5%	1/4W	F
R649	I-249-409-11	CARBON	220	5%	1/4W	
R650	1-247-713-11	CARBON	1K	5%	1/4W	F
R651	l-249-377-11	CARBON	0.47	5%	1/4W	F
			0.47	5%	1/4W	F
R653	1-249-377-11	CARBON	0.47	5%	1/4W	F
R654	1-249-377-11	CARBON	0.47	5%	1/4W	F
R655	1-249-377-11	CARBON	0.47	5%	1/4W	F
R656	1-249-377-l 1	CARBON	0.47	5%	1/4W	F
R657	1-249-377-11	CARBON	0.47	5%	1/4W	F
R658	1-249-377-l 1	CARBON	0.47	5%	1/4W	F
R659	l-249-377-11	CARBON	0.47	5%	1/4W	F

<VARIABLE RESISTOR>

RV101 1-238-023-11 RES, ADJ, CARBON 470K

<SWITCH>

S101 ⚠. l-571-532-23 SWITCH, TACTIL (POWER).
S102 1-571-532-21 SWITCH, TACTIL
S103 l-571-532-21 SWITCH, TACTIL
S104 1-571-532-21 SWITCH, TACTIL
S105 l-571-532-21 SWITCH. TACTIL

S106 I-571-532-21 SWITCH, TACTIL

<SPARK GAP>

SG501 I-519-422-11 GAP, SPARK

<TRANSFORMER>

T501 ⚠. 1-437-195-13 TRANSFORMER, HORIZONTAL! DRIVE
T502 ⚠.1-424-545-21 TRANSFORMER, FERRITE (PMT)
T503 ⚠.1-439-502-11 TRANSFORMER ASSY, FLYBACK (NX-2600A3)
T603.A. I-450-270-12 TRANSFORMER, CONVERTER (CDT)
T604 ⚠.1-450-559-11 TRANSFORMER, CONVERTER (PRT)

T605 ⚠.1-450-560-11 TRANSFORMER, FERRITE (SBT)

<TUNER>

TU101 ⚠1-465-371-11 TUNER, ET (BTP-RA401) (USA ONLY)
&l-465-371-21 TUNER, ET (BTP-RA401) (CND ONLY)

<CRYSTAL>

X101 l-577-082-11 VIBRATOR, CERAMIC

****

*A-1347-053-A V BOARD, COMPLETE
****

<CAPACITOR>

(Cl201	l-124-903-11	ELECT	1MF	20%	50V	
C1202	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
(Cl203	I-124-903-11	ELECT	1MF	20%	50V	
C1204	l-124-903-11	ELECT	1MF	20%	50V	
(Cl205	I-124-927-11	ELECT	4.7MF	20%	50V	
(Cl206	l-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C1207	l-124-927-11	ELECT	4.7MF	20%	50V	
C1208	l-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C1209	1-126-101-11	ELECT	100MF	20%	16V	
(Cl210	l-163-037-11	CERAMIC CHIP	0.022MF	10%	25V	

REF.NO.	PART NO.	DESCRIPTION			REMARK
C1211	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C1212	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C1213	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1214	L-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1215	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1216	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1217	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C1218	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1219	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1220	1-163-113-00	CERAMIC CHIP	68PF	5%	5ov
C1221	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1222	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1223	1-124-925-11	ELECT	2.2MF	20%	50V
C1224	1-124-925-11	ELECT	2.2MF	20%	50V
C1225	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1226	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1227	L-163-093-00	CERAMIC CHIP	10PF	5%	50V
C1228	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C1229	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C1230	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C1231	1-124-902-00	ELECT	0.47MF	20%	50V
C1232	1-136-171-00	FILM	0.33MF	5%	50V
C1233	1-126-529-11	ELECT	0.47MF	20%	50V
C1234	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C1235	1-124-903-11	ELECT	1MF	20%	50V
C1236	1-126-101-11	ELECT	100MF	20%	16V
C1237	1-136-169-00	FILM	0.22MF	5%	50V
C1238	1-124-907-11	ELECT	10MF	20%	50V
C1239	1-136-169-00	FILM	0.22MF	5%	5ov
C1240	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C1241	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C1242	1-163-114-00	CERAMIC CHIP	75PF	5%	50V
C1243	1-126-101-11	ELECT	100MF	20%	16V
C1244	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C1245	1-164-232-11	CERAMIC CHIP	0.01MF	10%	5ov
C1248	1-124-477-11	ELECT	47MF	20%	16V
C1250	1-124-477-11	ELECT	47HF	20%	16V
C1251	1-126-233-11	ELECT	22MF	20%	25V
C1252	1-124-477-11	ELECT	47MF	20%	16V
C1253	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1254	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1255	1-124-477-11	ELECT	47HF	20%	16V
C1256	1-124-477-11	ELECT	47MF	20%	16V
C1257	1-124-477-11	ELECT	47MF	20%	16V
C1258	1-124-477-11	ELECT	47MF	20%	16V
C1259	1-126-101-11	ELECT	100MF	20%	16V
C1260	1-136-173-00	FILM	0.47MF	5%	50V
C1261	1-124-477-11	ELECT	47HF	20%	16V
C1262	1-124-477-11	ELECT	47MF	20%	16V
C1263	1-124-477-11	ELECT	47MF	20%	16V
C1264	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1265	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C1266	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1267	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1268	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1269	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1270	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1271	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1272	1-124-477-11	ELECT	47MF	20%	16V
C1273	1-124-477-11	ELECT	47MF	20%	16V
C1275	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1276	1-164-232-11	CERAMIC CHIP	0.01MF	10%	5ov
C1277	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1278	1-136-165-00	FILM	0.1MF	5%	50V
C1279	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1280	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1281	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1282	1-164-232-11	CERAMIC CHIP	0.01MF	10%	5ov
C1283	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1287	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1288	1-126-103-11	ELECT	470MF	20%	16V
C1290	1-163-101-00	CERAMIC CHIP	22PF	5%	5ov

<DIODE>

D1202	s-719-404-46	DIODE	MA110

<FILTER>

FL1200	1-239-140-11	FILTER, LOW PASS	

<IC>

IC1200	8-759-517-74	IC	MB81461-12-PSZ-G-BF2
IC1201	8-759-512-86	IC	MB86140P-SH
I Cl202	8-759-983-44	IC	MB40176P
IC1203	8-759-512-85	IC	MB3511P-SH
IC1204	8-759-711-23	IC	NJM2234L
IC1205	8-759-711-23	IC	NJM2234L

<COIL>

11200	1-408-421-00	INDUCTOR	100UH
L1201	1-408-419-00	INDUCTOR	68UH
11202	1-408-421-00	INDUCTOR	100UH
11203	1-408-419-00	INDUCTOR	68UH
11204	1-408-413-00	INDUCTOR	22UH
11205	1-408-421-00	INDUCTOR	100UH

<TRANSISTOR>

Q1201	8-729-216-22	TRANSISTOR	2SA1162-G
Q1202	8-729-920-74	TRANSISTOR	2SC2412K-QR
81203	8-729-920-74	TRANSISTOR	2SC2412K-QR
O1204	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q1205	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q1206	s-729-920-74	TRANSISTOR	2SC2412K-QR
Q1207	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q1208	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q1209	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q1210	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q1211	8-729-216-22	TRANSISTOR	2SA1162-G
Q1212	8-729-920-74	TRANSISTOR	2SC2412K-QR
Q1213	8-729-920-74	TRANSISTOR	2SC2412K-QR

<RESISTOR>

JR1201	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR1202	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR1205	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR1208	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR1210	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR1211	1-216-295-00	METAL GLAZE	0	5%	1/10W
A1201	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1203	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R1204	1-216-295-00	METAL GLAZE	0	5%	1/10W
R1205	1-216-025-00	METAL GLAZE	100	5%	1/10W

Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité Ne les remplacer que par des pièces de numéro spécifié

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1206	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R1207	1-216-027-00	METAL GLAZE 120 5% 1/10W	
R1208	1-216-057-00	METAL GLAZE 2 2K 5% 1/10W	
R1209	1-216-053-00	METAL GLAZE 1 5K 5% 1/10W	
R1210	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1211	1-216-047-00	METAL GLAZE 820 54 1/10W	
R1212	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R1213	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1214	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R1215	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1216	1-216-057-00	METAL GLAZE 2 2K 5% 1/10W	
R1217	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1218	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1219	1-216-049-00	METAL GLAZE 1K 54 1/10W	
R1220	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1221	1-216-115-00	METAL GLAZE 560K 5% 1/10W	
R1222	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1223	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1224	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1225	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1226	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1227	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1228	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1229	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1230	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1231	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R1232	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R1233	1-216-115-00	METAL GLAZE 560K 5% 1/10W	
R1234	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R1235	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1236	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1237	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1238	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R1239	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1240	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1241	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1242	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1243	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1245	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1246	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1247	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1248	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1249	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R1250	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1251	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1252	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1253	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1254	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1255	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1256	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1257	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1258	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1259	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1260	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R1261	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1262	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1263	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1264	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1265	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1266	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1267	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R1268	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1269	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1272	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1273	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1274	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1275	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1276	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R1277	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1278	1-216-057-00	METAL GLAZE 2.21; 5% 1/10W	
R1279	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1280	1-216-049-00	METAL GLAZE 1K 5% 1/10W	

<CONNECTOR>

V11	*1-564-514-11	PLUG, CONNECTOR 11P
V20	*1-564-513-11	PLUG, CONNECTOR 10P

<CRYSTAL>

X1201	1-527-722-00	OSCILLATOR, CRYSTAL
X1202	1-527-722-00	OSCILLATOR, CRYSTAL

****

MISCELLANEOUS
****

8.1-426-350-11 COIL, DEMAGNETIZATION
⚠ 1-451-275-31 DEFLECTION YOKE (Y28PFA)
1-452-032-00 MAGNET, DISK: 10MM ϕ
1-452-094-00 MAGNET, ROTATABLE DISK; 15MM ϕ
1-544-549-11 SPEAKER

1-573-657-11 PLUG, F-PIN
⚠ 1-590-492-21 CORD, POWER (WITH CONNECTOR)

V901 ⚠ 8-737-753-05 PICTURE TUBE (A68JMT50X)

****

ACCESSORIES AND PACKING MATERIALS
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PART NO.	DESCRIPTION	REMARK
4-032-388-21	MANUAL, INSTRUCTION	
4-032-388-31	MANUAL, INSTRUCTION (CND ONLY)	
4-032-388-41	MANUAL, INSTRUCTION (USA ONLY)	
*4-032-763-01	CUSHION (UPPER) (ASSY)	
*4-032-764-01	CUSHION (LOVER) (ASSY)	
*4-032-765-01	INDIVIDUAL CARTON (FOR SDP)	
*4-032-862-01	INDIVIDUAL CARTON (FOR VTM)	
*4-035-222-01	CUSHION, PICTURE TUBE	
*4-384-027-01	BAG, PROTECTION	

REMOTE COMMANDER

1-465-773-11 REMOTE COMMANDER. (RM-Y102)
9-998-985-01 COVER, BATTERY (FOR RM-Y102)

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